

**State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
MEETING**

Location of Meeting
Marriott Downtown Hotel
820 W. 7th Avenue
Anchorage, Alaska

**MINUTES OF
April 22-23, 2010**

Thursday, April 22

CALL TO ORDER

The Chair was delayed, and VICE CHAIR SAM TRIVETTE called the meeting of the Alaska Retirement Management Board (ARMB) to order at 9:04 a.m.

ROLL CALL

Seven ARMB trustees were present at roll call to form a quorum. Chair Gail Schubert arrived at 9:12 a.m. and assumed the duty of chair at that time.

ARMB Board Members Present

Gail Schubert, *Chair*
Sam Trivette, *Vice Chair*
Kristin Erchinger
Commissioner Patrick Galvin
Commissioner Annette Kreitzer
Martin Pihl
Tom Richards
Mike Williams

ARMB Board Members Absent

Gayle Harbo

Investment Advisory Council Members Present

Dr. William Jennings
Dr. Jerrold Mitchell
George Wilson

Consultants Present

Robert Johnson, outside legal counsel
Michael O'Leary, Callan Associates, Inc.
Mike Barnhill, Alaska Department of Law (by teleconference)

Department of Revenue Staff Present

Jerry Burnett, Deputy Commissioner
Gary M. Bader, Chief Investment Officer
Pamela Leary, State Comptroller
Bob Mitchell, Senior State Investment Officer
Zachary Hanna, State Investment Officer
Ryan Bigelow, State Investment Officer
Scott Jones, Assistant State Comptroller
Judy Hall, Liaison Officer

Department of Administration Staff Present

Rachael Petro, Deputy Commissioner
Patrick Shier, Director, Division of Retirement and Benefits
Teresa Kesity, Chief Financial Officer

Invited Participants and Others Present

David Slishinsky, Christopher Hulla and Michelle DeLange, Buck Consultants, Inc.
Leslie Thompson, Gabriel Roeder Smith & Company
Thad Gray and Tim Maloney, Abbott Capital Management
James Chambliss, Canyon Lew and Steve Kim, Pathway Capital Management
Kristin Harper and Stacie Ikpe, Lord Abbett & Co.
Ken Monaghan, Rogge Global Partners
Jennifer Beatty and Greg Spencer, MacKay Shields
Ned Notzon, Chris Dyer, Charles Shriver, Tony Luna and Bob Birch, T. Rowe Price
John Alcantra, NEA Alaska
Joelle Hall, AFL/CIO
David Teal, Legislative Finance
Jeff Pantages, Alaska Permanent Capital Management
Peggy Wilcox, APEA/AFT

PUBLIC MEETING NOTICE

JUDY HALL confirmed that public meeting notice requirements had been met.

APPROVAL OF AGENDA

MR. BADER requested the addition of #15(c) Renew contract with Gabriel Roeder Smith.

COMMISSIONER KREITZER moved to approve the agenda as amended. MR. WILLIAMS seconded. The agenda was approved without objection.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

There was no one listening by telephone or attending the meeting in person who wished to speak.

APPROVAL OF MINUTES - February 25-26, 2010

COMMISSIONER KREITZER moved to approve the minutes of the February 25-26, 2010 meeting. MR. WILLIAMS seconded.

COMMISSIONER KREITZER submitted several corrections:

1. Page 7, second paragraph, to read, "Referring to Buck Consultants' November billing, Ms. Harbo asked what the geographic ~~difference~~ differential study for PERS was."
2. A spelling correction to Teresa Kesey's first name throughout the minutes.
3. Substitute "Pew" report for "Pugh" report in three places on page 6.

The minutes were approved as amended.

REPORTS

1. Chair Report

The Chair was not present to make a report.

2. Committee Reports - None.

3. Retirement & Benefits Division Report

3(a). Legislative Update

COMMISSIONER KREITZER stated that House Bill 30 and Senate Bill 23, which would have returned [the Public Employees' Retirement System] to a defined benefit Tier III scenario, did not move in the legislative session.

She also reported that the SB 125 contribution for the Public Employees' Retirement System (PERS) was \$165,841,171, and the contribution for the Teachers' Retirement System (TRS) was \$190,850,258.

COMMISSIONER KREITZER said she would provide trustees with copies of the Department of Law memorandum behind the Governor's decision to join Florida in a lawsuit regarding the national health care reform [that Congress passed and President Obama signed into law in late March].

MR. PIHL asked if the state's contribution amount was the full difference between the 22% and 12.56% contribution rates and the actuarial rates that the Board adopted. COMMISSIONER KREITZER said yes.

3(b). Fiscal Year 2011 HRA Amounts

Director of the Division of Retirement and Benefits (DRB), PATRICK SHIER, drew attention to the March 18, 2010 memorandum in the packet that presented the fiscal year 2011 Health Reimbursement Arrangement Plan employer contribution amounts for PERS and TRS.

3(c). New Auditor

MR. SHIER briefly described the background of Mr. Robert Gregg, the new auditor hired in DRB.

3(d). Update on Security Breach

COMMISSIONER KREITZER stated that about 22,000 former PERS and TRS employees have signed up for the [credit monitoring or identity theft protection] the State of Alaska is offering.

4. Treasury Division Report

Deputy Commissioner JERRY BURNETT reviewed an action memo in the packet requesting Board approval to renew the State Street Bank custody services contract that would extend the contract to June 30, 2013, with three one-year renewal options. He stated that after a lengthy review staff determined that they were satisfied with State Street's current custodial services and began updating the current custody services contract. In 2007, the Treasury Division entered into a settlement with State Street Bank regarding an investment issue, which resulted in contract rates being reduced by 19% through 2013.

MR. TRIVETTE inquired about the amount of the contract. MR. BURNETT said it was about \$1.1 million for the ARMB portion and \$1.3 million for the full amount including the Treasury part.

MR. TRIVETTE moved that the Alaska Retirement Management Board approve entering into an Amended and Restated contract with State Street Bank that extends the contract to June 30, 2013, with three one-year renewal options. MR. PIHL seconded.

The motion passed unanimously, 8-0.

5. Chief Investment Officer Report

Chief Investment Officer GARY BADER commented on the following items:

- Rebalancing of the PERS and TRS pension plans and the defined contribution plans to bring them closer to targets.
- Notification of reducing the exposure to the Russell 200 Index fund by \$120 million and adding the funds to fixed income.
- Report on a settlement transaction that MacKay Shields made with Francisco Partners in the ARMB's high yield account. Portfolio management staff checked with Mr. Barnhill in the Department of Law, who had no difficulty with staff accepting the MacKay Shields plan.
- A request that State Street Global Investors use commission recapture brokers when possible, but not at the expense of best execution.
- Transition of \$150 million from the Long Term Fixed Income Fund to the Intermediate Term Treasury Fund, per the Board's approval of this strategic move at the February meeting.
- Offers of employment to two people as assistant state investment officers in the portfolio management section: Elizabeth Walton and Sean Howard.
- A call from T. Rowe Price reporting an error in computing fees for three of their building block funds. The overpayment in fees has been rebated to the participant accounts. Treasury staff Pamela Leary and Ryan Bigelow will be working with T. Rowe Price to determine what additional funds are due to the accounts as a result of lost earnings on what would have been higher account balances. The building block funds are extremely large funds, and Mr. Bader calculated that the difference in fees is less than six basis points, which will be even less when distributed to the various funds.
- The Board had approved staff's recommendation to approve the offer by the Lehman Brothers trustee and accept the current staff who are working on the real estate funds as the manager of the funds going forward. Lehman Brothers was unsuccessful in selling the real estate investment unit and then made an offer to the existing staff, who will be managing the funds.

6. Fund Financial Report

State Comptroller PAMELA LEARY reviewed the activity in the various retirement funds for the month of February and for the first eight months of the fiscal year. She noted that all the funds totaled \$16.6 billion at February 28, which represented a 11.5% increase since the beginning of the fiscal year. She also provided the preliminary numbers for March, which indicated a total balance of \$17.1 billion or roughly a 15% increase for the fiscal year. She focused on PERS and the new column that showed the increase or decrease in invested assets, and talked about the cash flows and the investment income.

MS. ERCHINGER said she appreciated the explanation about the difference between the impact of contributions versus investment income, and asked if staff could insert another column beside the *Investment Income* column to demonstrate the percentage increase attributable to that versus the *Net Contributions/Withdrawals*. MS. LEARY said she could do that.

MS. LEARY next reviewed the graphical depiction of activity in the pension and health care trust funds, including the actual asset allocations versus targets. She also presented the non-participant directed plans by asset pool and manager for February. Domestic equities were positive, and the new convertible bond pool was up 1.8%. Global equities had a slight decline, although the emerging equity pool had income for the month. Private equity also increased, but the absolute return pool had a slightly negative return. The real assets pool had mixed results, but the REIT (real estate investment trust) pool advanced by 5.3% in February. Real estate had a fairly flat month: the December year-end income from the different real estate funds was not yet brought forward into the financial statements.

MS. LEARY indicated that the statements for the participant directed plans were included in the packet, and she would be happy to answer any questions on those.

MR. PIHL observed that it was good to see the cash balances were very low in a good-performing market.

Chief Financial Officer TERESA KESEY briefly presented the February 28, 2010 supplemental financial report prepared by the Division of Retirement and Benefits.

7. Private Equity Program 2010 Tactical Plan

State Investment Officer ZACHARY HANNA introduced the private equity managers from Abbott Capital Management and Pathway Capital Management, who were present in the audience. He then gave a presentation on staff's annual review and planning for the ARMB's investments in private equity. *[A copy of the slides for this presentation is on file at the ARMB office.]*

MR. HANNA reviewed the unique characteristics, structure, primary strategies, and implementation of private equity investing. The ARMB's expected return for its private equity program is 350 basis points over the Russell 3000 Index. Through 2009, the ARMB is invested in 213 partnerships with 90 firms. Manager selection is the critical factor in portfolio implementation; the average difference in performance between top quartile managers and median managers over the past 20 years is 12%. Diversification is also important, since private equity can be a cyclical business.

MR. HANNA next spoke about the private equity market in 2009. Fundraising was down

significantly. Limited partners slowed their commitment pace, since many were over allocated to private equity as a result of public market declines. General partners who could postpone fundraising did so; those who could not took longer to close funds and often closed below their fund size targets. Not surprisingly, negotiating power shifted to the limited partner, and fund terms have become more limited-partner friendly over the past year.

Deal activity slowed as general partners focused on existing portfolio companies, and credit markets were difficult to access. Deal pricing dropped back to 2004 levels. The amount of leverage used was close to historic lows and, as a result, the amount of equity going into deals was high.

Regarding exit opportunities, the initial public offering (IPO) market rebounded in 2009. However, these public offerings were largely used to pay down debt, rather than as true exits for equity sponsors. Merger and acquisition activity also picked up in 2009, and leverage recapitalizations slowly restarted.

MR. HANNA gave an overview of the ARMB private equity program, which began in 1998. Asset allocation has increased from 3% to 7% of the total retirement fund. The two gatekeepers are Abbott Capital Management, hired in 1998, and Pathway Capital Management, retained in 2001. Both have discretion to invest on the ARMB's behalf. The ARMB also makes investments directly in private equity partnerships. During the volatile period since 1998, the ARMB and its advisors have built a high-quality, well-diversified portfolio. Relative performance has been good. Compared with partnerships that started investing in the same year, five out of the past eight vintage years through 2005 were top quartile, and three years were second quartile. Returns have decreased since last year but are still relatively strong. The internal rate of return since inception is 7.1%, down 387 basis points from 2008. Staff calculated public market equivalent returns, using the actual ARMB private equity cash flows to simulate buying and selling public market indices: the 7.1% IRR for the private equity portfolio compares favorably with public market equivalent returns of 0.3% for the S&P 500 Index and 1.0% for the Russell 3000 Index.

The lack of exit opportunities flowing through to equity sponsors in 2009 resulted in distributions to the ARMB portfolio decreasing to \$75 million. Contributions also decreased to \$123 million, roughly half the level of 2008. The ARMB has \$2.6 billion in total commitments, with \$1.8 billion paid into partnerships. The total value at year end, including distributions of \$2.2 billion, was 1.2 times the amount paid in.

The portfolio is very well diversified by strategy. The targets are 25% to venture capital, 45% to buyout, and 30% to special situations. The portfolio is close to these guidelines, and staff expects this diversification to remain in line with long-term targets. The portfolio is also well diversified by industry, by geographic region, and by investment

stage. International is now 33.6% of the portfolio.

MR. HANNA stated that the commitment target for 2009 was \$320 million. During the year, \$183 million was committed to 19 partnerships. Commitments were low because many high quality firms either did not need to raise funds due to the slow investment pace or postponed fundraising due to the difficult environment.

The increase in economic and capital market stability is providing a slow recovery for private equity. There is a moderate increase in investment pace, pricing has reached levels at which buyers and sellers can transact, and credit is also available for some deals. The exit environment is also continuing to improve. Fundraising is beginning to recover, and more groups are coming to the market. However, it is still slow enough that hitting allocation targets may be difficult for this year. There will also be a number of groups that will be unable to raise new funds or even to survive due to poor past performance. Private equity groups will also continue to focus on existing portfolio companies. Although fund sponsors have successfully pushed debt maturities out to 2013 and beyond, a real economic recovery will be necessary to pay down the high debt levels used in some recent buyouts.

MR. HANNA stated that staff was recommending a 2010 commitment target of \$335 million — \$135 million for Abbott, \$125 million for Pathway, and \$75 million for direct partnership investments — with a gradual increase in the total over the next five years. Private equity is currently over the 7% allocation. With the recommended commitment pacing, private equity should move back to its allocation target of 7% over the 10-year planning cycle.

At Mr. Bader's request, MR. HANNA explained how staff used actuarial projections for the rate of retirement fund asset growth over the next ten years. He added that the volatility of the overall retirement fund size is what ultimately drives the private equity allocation on a year-to-year basis. Staff layers in all the commitments made in private equity and the way in which those commitments have been drawn down and cash has been returned over time on a year-by-year basis. They then make projections about how cash will be called in the future and returned in the future, which in the model drives the projection for what percentage private equity is expected to be of the total retirement fund in future years.

MR. O'LEARY asked if the calculation for total fund net asset growth was anticipated contributions, less projected benefit payments, grown at the actuarial discount rate. MR. HANNA said that was correct. MR. O'LEARY sought confirmation that there was no separate return assumption for the private equity component. MR. HANNA explained that there effectively was not: staff changed the model over time to account for what history has taught them, and so the model does not include any projected growth in the underlying investments. It has turned out not to be a significant assumption in terms of

how it affects the overall bottom line.

MS. ERCHINGER inquired if the ARMB was paying fees on commitments or actual payments. MR. HANNA stated that the dominant source of fee charges is at the underlying fund level. In general, at the start of a fund, the ARMB is paying a fee based on commitments. The J-curve effect in private equity investment returns comes from the size of that fee relative to the small level of investment activity when a new fund starts. Then private equity partnerships have a carried interest, and the industry standard for a successful fund is 20% of the gains as a performance fee. The ARMB advisors are paid an annual fee that is based on net asset value in one case, and in the other case is a fixed fee negotiated by contract.

CHAIR SCHUBERT asked if private equity being over its 7% allocation was because the total retirement fund balance declined or the ARMB overcommitted to private equity. MR. HANNA replied that it was largely because the retirement fund balance declined. However, commitment pacing was higher during the 2006-2007 period than it is now. In essence, if the ARMB had known that retirement fund balances were going to be what they are now, the Board would likely have committed at a slightly slower pace. When the public markets declined as sharply as they did, private equity became 10% of the retirement fund at the end of 2008 because the private equity decline was very muted at that point. Now a lot of write-offs have taken place in the private equity pool, and public markets have rebounded. He thought that commitment pacing had been reasonable, but it was probably 15%-20% stronger than it could have been, given where the retirement fund balance is now.

COMMISSIONER GALVIN asked for comment on the home-country bias aspect of the ARMB's private equity portfolio and if it is truly geographically diversified, given Mr. Hanna's report that international is 33.6% of the portfolio. MR. HANNA stated that private equity relies on a strong legal system and financial system infrastructure. There are places in the world that do not have infrastructure that is ready for private equity. Contract rates are a big issue, but being able to exit an investment is at the forefront of everybody's mind. Private equity got its start in the developed markets, and it remains largely a developed market phenomenon. The ARMB portfolio is a reflection of that. However, there is more and more private equity activity in parts of Asia and elsewhere in the world, and the portfolio has some of that exposure. The Asian exposure is 3.5%, but most of the international is non-U.S. North American exposure with a bit of Latin American exposure. As emerging markets develop their financial and legal infrastructure, private equity will be pursuing more opportunities elsewhere in the world.

MR. PIHL inquired if the current market conditions and the flow of money into private equity afforded an opportunity to negotiate what are relatively high fees, specifically from commitment structure to a placement structure. MR. HANNA stated that terms have become generally more limited-partner friendly over the past 18 months, and the

economics and fee structure are where people focus most. He thought a separate account type structure would be more difficult, but he deferred to Abbott and Pathway to address that in their presentations. However, fees have come down as much as 20% to 25% in some areas.

Addressing the international question that Commissioner Galvin raised, DR. MITCHELL said the appeal of investing has always been a little greater than the results, particularly in Asia. The economic numbers and the vitality of the companies there are very attractive, but the results are not so attractive for the reasons that Mr. Hanna mentioned. A country like China, where the public equity markets have returned 80%, begs the question of how much more an investor would get from private equity.

DR. JENNINGS stated that one third of a private equity portfolio in international seems typical to the other investment committees and boards he is involved with. He related how an organization he has contact with pushed to overweight the international part, but the managers wound up merging their emerging market fund into a broader international fund. Picking good private equity managers and the quality of the markets were issues that constrained the organization's ability to implement the strategy in that case.

MR. O'LEARY said the development of components of private equity markets in other economies has been very different. In Japan and Germany, for example, corporate sources of funding for private equity opportunities are much more dominant, particularly in venture capital.

MR. HANNA drew attention to the action memo and accompanying resolution in the packet, in which staff recommended adoption of the 2010 tactical plan.

MR. TRIVETTE moved that the Alaska Retirement Management Board adopt Resolution 2010-04 approving the 2010 annual tactical plan for investment of private equity assets. MR. PIHL seconded.

MR. TRIVETTE asked if the remaining commitment for 2009 was rolled forward to the 2010 tactical plan. MR. HANNA said yes.

MS. ERCHINGER inquired about the likelihood of the ARMB being able to fulfill the 2010 commitments if the gatekeepers were unable to make the target commitments last year because there was nothing to invest in. She noted that the ARMB is paying fees on commitments, and wondered if it would be better to reduce the commitments in the short term.

MR. HANNA replied that in general most of the fees are paid once the ARMB makes the commitments. For example, commitments were roughly half the level that was

projected: the ARMB is not paying fees on the amount that was not committed. There is nothing lost in failing to commit, other than potentially not meeting targets over the longer term.

On an outcry vote, the motion carried unanimously, 8-0.

8. Abbott Capital Management, LLC

THAD GRAY and TIM MALONEY appeared before the Board to review the private equity portfolio under their management in 2009 and to discuss the tactical plan for 2010. *[A copy of the presentation material is on file at the ARMB office.]*

MR. GRAY started by saying that the ARMB's private equity portfolio at Abbott has survived two perfect storms since its inception in 1998 and remains in healthy condition. The first storm was the collapse of the internet bubble in 2000-2001, which had its greatest impact on the venture segment, and the second storm was the collapse of the financial system in 2008 and the ensuing recession. Abbott believes the private equity portfolio has weathered these two storms for two main reasons; being well diversified, and having good managers who had already been tested by cycles and who knew how to react when the storm struck.

MR. GRAY stated that the credit markets, the IPO market, and the merger and acquisitions market — which were clearly in deep doldrums for at least the last 18 months — are now beginning to show some signs of life. The market is still very challenging for early stage venture capital companies, but Abbott's venture strategy also includes growth equity. There has been a shift in the venture capital segment away from early stage and toward the later stage growth-oriented companies. The balance of power between the limited partners and the general partners has shifted in favor of the limited partners as a result of a slower fundraising cycle. Abbott has been able to negotiate concessions in a number of instances.

MR. GRAY said that 2009 clearly marked the low point for the private equity market. From the current vantage point, the damage to the ARMB portfolio seems to be somewhat less severe than what Abbott witnessed from the bursting internet bubble in 2000-2001. Current activity is beginning to return to normal, albeit at a pace that is still a far cry from the frothy period of 2006 and 2007. Of interest is that while the \$39 million of distributions the ARMB received in 2009 was low compared to prior years, more than half of those distributions came in the last three months of the year. The pace of distributions has held up nicely in the first three months of 2010. He briefly reviewed some larger transactions that affected the portfolio in the last year.

MR. GRAY cautioned that even as conditions improve somewhat there remains a significant wall of debt held by buyout portfolio companies that is going to be maturing beginning in 2013 and through 2015. Private equity sponsors currently are acutely

focused on managing the balance sheets of their portfolio companies, because that is key to the companies being able to refinance and survive in good shape to return good results to the limited partners.

MR. MALONEY spoke about the current fundraising conditions, saying that general partners are mostly raising much smaller funds than in past cycles. Abbott believes this keeps general partners more focused on their core strategy where they have generated their historical success, and it helps prevent the style drift that Abbott had seen with some general partners in the credit bubble years. They also believe that smaller fund size will inevitably lead to a higher bar that general partners have to reach in order to make an investment decision, which should lead to higher returns in the long run. Another positive factor from the reduced fundraising environment is that Abbott has a much longer time to complete their due diligence on prospective investments. The third positive factor is a greater alignment of interest between general partners and limited partners.

MR. MALONEY described what general partners are doing with the substantial capital that was raised pre-2008. The high yield market rebounded substantially in 2009; however, much of that capacity went to refinancing the bad balance sheets of existing buyout-backed companies, rather than going toward new financing. The general partners that Abbott committed to spent much of last year focused on their portfolios, trying to put out fires and trying to improve the health of companies through refinancing or finding strategic add-on acquisitions that will fuel growth of these companies. There has been some debt available for new deals, but that debt comes with a lot of strings attached, such as tighter covenants and a much larger contribution of equity on the part of the sponsors. Deals last year were much smaller, and deals greater than \$2.5 billion in transaction value essentially evaporated.

MR. MALONEY mentioned that a big improvement in the market is a much greater level of transparency and information sharing between the limited partners and general partners. It transpired when FASB 157 was implemented in 2009, an accounting standard that requires general partners to mark all their portfolio company investments to market value. As a result, they have to justify valuations, and they are sharing much of the information with Abbott.

MR. MALONEY said Abbott has noticed an intense increased focus from buyers and sellers on secondary investments. The data suggests that there was a bit more smoke than fire last year in the secondary deal market, as the actual number of interests that were traded came in well below the market expectations. With the recovery of the public markets, there were far fewer limited partners that had liquidity issues towards the end of the year. So only the most distressed limited partners were in a position of having to sell, and that contributed to the low volume in secondaries. Also, prices began to creep up in the second half of 2009, in conjunction with the recovery in the public markets,

and became far less attractive than they were in the first half of the year. Abbott was relatively active in the secondary market during the first two quarters of 2009 and actually completed four secondary investments in the venture capital space on the ARMB's behalf. Toward the end of the year, Abbott continued to make bids but was outpriced. Abbott tends to be very opportunistic in this space and believes that price discipline is paramount to successful investing in secondaries.

MR. O'LEARY asked if the secondary market tended to be an investor that wishes to sell a segment of a portfolio or if it was very much an individual partnership level market. MR. MALONEY responded that it is a healthy combination. Some of the larger transactions last year were portfolio deals. Abbott tends not to bid on entire portfolios of funds. Besides price discipline, their angle on the secondary market is to bid on funds that they are already committed to because they can benefit from an information advantage. However, there are a lot of buyers in the secondary market that engage almost exclusively in portfolio level acquisitions.

MR. GRAY added that often an entire portfolio has a list of partnerships that Abbott reviewed in the primary market and declined to invest in previously, so it does not make sense to buy the partnerships on the secondary market. The price would have to be near zero because they would be on the hook for the unfunded commitments.

Regarding the balance of power swinging in the investor's favor, MR. MALONEY said Abbott's negotiating position with the general partners has definitely improved in the areas of governance, alignment of interest, and transparency. Three times in the past six months Abbott has been able to materially move the economics in favor of the limited partners. For example, there were three funds that ARMB has committed to that have historically charged a carried interest of about 25% of profits, and in two of those cases Abbott was very influential in negotiating that carried interest down to 20%.

MR. BADER asked if the exit strategies of companies have changed as a result of the Sarbanes-Oxley Act of 2002 and if Abbott thought there was any impact on private equity as an asset class. MR. MALONEY said Abbott has heard the excuse of increased compliance costs associated with Sarbanes-Oxley, from venture capitalists in particular, for a number of years. There may be some validity in a lot of cases, but the bigger factor affecting the lack of public offerings in the venture space is because many banks do not cover these small companies any more. If they do not have analyst coverage, it will reduce the level of institutional public investor appetite for these IPOs because investors just do not know about them.

MR. TRIVETTE inquired if Abbott had to hire additional staff to spend more time on transparency and governance issues. MR. MALONEY replied that they added one person to the investment staff in the past year. Because the commitment pace was very slow last year, they had plenty of time to complete all the due diligence activities. MR.

GRAY added that over the years Abbott has been asking for better transparency and governance; the difference now is that the general partners are listening and accommodating a bit more because they are having a tougher time raising funds.

DR. MITCHELL requested comment on generational change in the general partnership world, as the first generation begins to retire. He also asked if some of the tax code changes might affect the private equity world.

MR. GRAY said Abbott focuses on generational change whenever they do due diligence on a partnership. It is difficult to generalize because every firm has their own dynamic and culture. The culture of the firm drives how generational transfer takes place; some firms manage it smoothly, while at other firms the founders are reluctant to give up their equity to people below them. When Abbott sees signs of the latter in the interview process with general partners, it is a major red flag and is frequently a reason why they do not invest in those firms. Abbott will avoid investing in firms where they believe generational change will be major source of turmoil down the road. On the second question, he did not know how tax code changes would impact the private equity world, but he doubted that many in his field were that concerned about it.

MR. O'LEARY mentioned that some people might impose preferred terms and conditions for limited partners at the risk of losing what they want. He inquired about the risk with that type of an approach. MR. MALONEY replied that Abbott's approach is that legal negotiations are part of the due diligence process. There is not a single fund they will commit to solely because they find the terms to be incredibly favorable. The investment opportunity has to stand on its own merits. But the legal structure of the partnership is certainly a reason for Abbott to say they will not go into something. So guidelines are helpful to the industry, but there is no single model of legal terms that should fit every single partnership. He agreed with Mr. O'Leary that the goal is to get into top quartile partnerships.

CHAIR SCHUBERT asked if Abbott had any firms that failed. MR. GRAY said the only firm that imploded was Candover, which had one billion euros of capital for their new fund that was slated to come out of a PLC vehicle that had a high degree of leverage. When the financial crisis hit in 2008, the PLC vehicle tripped a number of covenants, and Candover was no longer able to make the billion euro commitment to the new fund. The limited partners had recourse, and Abbott was able to pull its own commitment to the Candover Fund. The fund size was reduced by 90%, and Abbott only has exposure to one portfolio company. That firm is just managing out their portfolio from the prior funds and will not be able to make any more investments. Other than Candover, no other general partner groups in any of Abbott's portfolios have gone out of business.

Continuing with their presentation, MR. MALONEY talked about the venture capital market. While not immune to the most recent turmoil in the markets, most of venture

capital funds in Abbott's portfolio have experience with managing investments through a steep down turn. They have been focused on maintaining the health of their existing investments, and in some cases making difficult decisions early on about whether or not to continue to fund some existing deals. This time around the venture capitalists in the ARMB's portfolio have done a much better job reserving appropriate levels of capital to continue supporting their most promising investments. That should help set the stage for better returns in the future. The venture capital exit market is still quite poor, but it showed some signs of life starting in the third and fourth quarters of 2009. The ARMB portfolio has had two meaningful venture capital exits so far in 2010.

MR. MALONEY stated that general partners and limited partners, who were prudent with their capital and did not over-extend themselves during the height of the credit bubble in 2005-2007, should be in a good position to benefit from the opportunities in the current environment. Most of the activity in 2009 revolved around existing company investments rather than new deals; that will likely remain a big aspect of activity for the next year or so, although Abbott expects to see a modest increase in new transactions. The pace of capital calls should increase modestly over the next 12 months, but it will remain well off the pace seen in the 2006-2007 time frame. Last year was not a banner year for distributions. Historically, the distribution pace has slightly lagged the capital call pace. The economy seems to be in recovery mode, and the two big questions are whether it will stay in that mode and will the capital markets continue to recover. The answers will highly affect investment activity and fundraising activity.

MR. GRAY gave a brief update on Abbott Capital as an organization, noting that they have had very little turnover, and no senior partners have left the firm since the ARMB hired Abbott in 1998, except for Ray Held's planned retirement in June 2009. Abbott remains strongly dedicated to alignment of interest with their clients and the general partner groups they invest with. The capital under management has grown at a moderate rate over the last 12 years. Abbott promoted three new managing directors in January 2010: Tim Maloney on the investment staff, general counsel Mary Hornby, and Paolo Parziale on the administrative staff. Abbott also hired two investment analysts, one of whom replaced an analyst who left.

MR. GRAY next reviewed the 2009 investment activity. The five primary commitments that Abbott made for ARMB last year were well below the normal number. It was not due to partnerships not coming to see Abbott, as they reviewed over 440 offerings in 2009. They just found fewer deals that were appealing last year. Of the five commitments made, two were to special situations partnerships, and three were to venture capital and growth equity partnerships.

MR. MALONEY described the ARMB portfolio construction in detail as of December 31, 2009. He talked about diversification by vintage year, industry, investment style, and geography. The majority of the ARMB's non-US capital is focused on Western

European buyout funds that invest in exit companies in mature capital markets.

MR. GRAY stated that Abbott has already closed on three transactions for ARMB in the first quarter of 2010, and they are confident about being able to commit the \$135 million target for the year. This will include investments with groups they have backed already, and they are in the initial stages of reviewing opportunities with new groups for the portfolio. The deal flow will be slower than 2006-2007, but they see an improvement from 2009. Abbott will continue their discipline and due diligence that they have always employed on ARMB's behalf.

MR. O'LEARY remarked that government seems to be a bigger and bigger factor as it deals with the market meltdown and aftermath. There has been a lot of interest and excitement in industries that are seemingly dependent upon incentives, such as clean energy. He asked how Abbott coped with that in an area where that has not historically been the case.

MR. GRAY said it is probably best to avoid industries that are not economical without a government subsidy. For private equity to invest in those or build a whole portfolio around it would be dangerous. In terms of what has happened in health care, how the terrain has shifted and who the winners and losers are going to be is very complex. Companies that are expert in this field are only beginning to figure out exactly how that will impact their portfolio in the long run.

MR. MALONEY added that Abbott has not done a lot in the clean technology space, although they have some exposure through existing general partners who have part of their strategy focused on that area. A lot of those are investments that are not necessarily dependent on receiving government tax credits to be successful. So the general partners share Abbott's concern about formulating an investment thesis based on government behavior.

MR. PIHL inquired why Abbott's presentation material did not show distributions by investment. MR. GRAY explained that because of the disclosure requirements under the Freedom of Information Act, Abbott is prevented from disclosing that level of detail publicly. Board members and staff are welcome to look at the information at the Abbott offices, but they would be unable to take the information with them.

CHAIR SCHUBERT thanked the Abbott gentlemen for the presentation. She called a short break from 10:59 a.m. until 11:10 a.m.

9. Pathway Capital Management

JAMES CHAMBLISS and CANYON LEW reported on the private equity portfolio that Pathway Capital has managed for the ARMB since 2002. *[A copy of Pathway's presentation material is on file at the ARMB office.]*

MR. CHAMBLISS said 2009 was a slow year for commitments to funds, a slow year for investments into portfolio companies, and a very slow year for dollars going back to limited partners in the form of realizations and distributions. However, Pathway and the underlying general partners were quite busy during the year, although it did not show in the three areas he just mentioned.

MR. CHAMBLISS gave a brief overview of the firm, which remains 100% independent and member-owned. One person was added as an owner in January 2010. There has been no senior level investment professional turnover since the firm's inception. Pathway remains a relatively young firm and, with the oldest partners being 56, there are no succession or retirement issues in the near future. Of the 15 owners, roughly one-third are in their fifties, approximately one-third of them are in their forties, and about one-third are in their thirties. He mentioned that Pathway has a discretionary separate account relationship with the ARMB. In 2005, Pathway made a decision to focus new business solely on fund-of-fund accounts, but they continue to maintain the existing discretionary separate account relationships.

MR. CHAMBLISS said private equity fund investing is not an infinitely scalable business model, because there are only so many top-quartile funds to invest in every year. Around 2002, Pathway decided to evolve the business model away from the non-discretionary separate account business and more toward the discretionary business model. That business model has evolved to where \$21 billion of their \$23 billion in assets under management is discretionary money, and that money is split about 50/50 between discretionary separate accounts and discretionary fund of funds. They believe this benefits Pathway and their clients and investors, because eight years later they have about the same amount of assets under management, and they invest about the same amount in partnerships now as they did in 2002. They are a much more efficient firm, and that makes Pathway more attractive to general partners as a result. Pathway views itself as an investment firm, not as an asset gatherer, so their goal and focus is to moderately grow the assets under management in order to continue effectively investing in the private equity asset class.

Although the business model has evolved, and the assets under management, by design, have been flat over the last eight years, they have grown the organization from 51 people to 104 — with much of that growth in finance, legal, information technology and support services. Pathway has 30 accountants and tax people and a legal team of eight people, including four attorneys. This allows the investment professionals to focus on nothing but finding the best private equity fund investments. This is a different world than eight years ago, and compliance, accounting and legal aspects of it call for much more due diligence and oversight on Pathway's part. They have staffed their team up accordingly.

MR. CHAMBLISS said he concurred with everything Mr. Hanna had presented about the market environment earlier, and he would not go over it again. Instead, he offered Pathway's insight on what they have seen in the last two to four months and what that may or may not lead to in private equity for the remainder of 2010:

- Credit markets opened up in 2009; in fact, the high yield market had its biggest year of issuance ever. It benefitted private equity deals done in 2006 and 2007 that had huge debt maturities that would come due in 2010, 2011 and 2012. The credit markets opening allowed these companies to amend their credit agreements and extend the maturities for two, three or four years. This has bought some time for the companies to work through the market environment and hopefully come out as a more profitable value-added business. Time will tell in that regard.
- Valuations have improved from the "darkest of the dark" in the March quarter of 2009. June saw a slight uptick in valuations, and there was another uptick in the September quarter. The December performance was good as well. Early reports from general partners are that they expect modest increases for their March 2010 valuations. Improved valuations are primarily the result of public markets increasing, and under FAS 157, the quarterly mark to markets in the private equity world are based on public market comparables. The underlying fundamentals of the companies in the private equity arena have improved as well. The focus is on improving the companies from a growth perspective, and the early signs have been somewhat positive over the last several months.
- Liquidity markets were tough in 2009 but improved late in the year for IPOs and M&As (mergers and acquisitions). It is early days, but Pathway is seeing more IPO announcements. Last night alone four private equity and venture-backed IPOs priced, and two of them were in the ARMB portfolio. The dark cloud on that silver lining is that those IPOs priced at or below where they were expected to price.
- Distributions were up on the ARMB portfolio in the fourth quarter and continued at a flat level in the first quarter of 2010.
- The fundraising market has improved in 2010 but not much. Pathway has committed to one fund for the ARMB so far this year. They expect to commit to one more in the next four to six months. The market will be slow heading into summer, and summer is always slow for fundraising. The second half of the year will be wait-and-see. The positive aspect of a challenging fundraising market is that the less money in the asset class, the less competitive it is, and the better it is for investors such as ARMB and Pathway. A lot of money was raised in 2006 and 2007 that is still sitting on the sidelines, and it will be several weeks before the uninvested capital works its way through.
- The environment feels better today than it did six months ago, but it is still early days and very dependent on the overall economic climate and ultimately the public and M&A markets.

MR. WILSON asked how long before the partnerships formed in 2006 and 2007 have to get the money out or they will have a real problem. MR. CHAMBLISS replied that five to six years is typical. Normally, a fund formed in 2006 would be 30% to 60% invested at this point and have 40% to 70% of the capital to get invested over the next 2-1/2 to three years. If the market improves and more deals are done, there may not be a problem; otherwise there will be issues to deal with.

CHAIR SCHUBERT inquired if Pathway Capital had any partnerships fail, as in being unable to raise funds and then basically going into servicing the existing companies. MR. CHAMBLISS said they had not.

Following up on Mr. Wilson's question, MR. O'LEARY asked, if a fund was nearing or could foresee the end of the investment period, if they were beginning to discuss with the limited partners the possibility of extending the investment period. MR. CHAMBLISS responded that a small number of general partners have approached Pathway to begin discussions about extending the investment period. That would not go without some sort of benefit to the limited partners. But those discussions are in the very early days because most of the funds raised in 2006 and 2007 still have 2-1/2 to three years of investment period left.

MR. O'LEARY asked if there is a retroactive fee reduction if the investment period passes, because fees were charged on the committed capital as opposed to the invested capital. MR. CHAMBLISS said it is not written into the limited partnership agreements, but part of Pathway's early discussions with their general partners is about the potential of not investing a fund in full and what sort of concessions they would expect as limited partners.

DR. MITCHELL remarked that all the gatekeepers and institutional investors he has talked with about private equity say they limit themselves to first quartile firms. He asked who invests in the second, third and fourth quartile firms.

MR. CHAMBLISS said it is almost a mathematical impossibility to invest in every single top quartile fund. Pathway believes in being very selective in private equity investing, and historically they have invested in about 2% to 3%, maybe 4%, of the investments they see every year. Other institutions with a lot of money to put to work in this asset class pursue more of an index approach and invest in a large number of firms. They may or may not outperform their benchmark of some premium over the public market, but they certainly will not be top quartile. And the return certainly will be below what Pathway believes the Board's expectation should be for private equity.

Next, MR. LEW reviewed the ARMB portfolio in light of the 2009 tactical plan, and what Pathway has planned for the 2010 tactical plan. Pathway committed \$75.4 million in

nine partnerships in 2009, well short of the \$130 million target for the year. The commitments were spread fairly evenly among two buyout funds totaling \$60 million, two venture capital funds totaling \$19.3 million, two special situations funds totaling \$16.2 million, and three restructuring funds totaling \$20 million. The portfolio is within all the target ranges by strategy.

MR. LEW stated that Pathway's objective is to invest in the highest quality opportunities, and they will only put capital to work if the opportunities are there. In 2009 the opportunities were not there, so they did not try to force anything by lowering their standards. The dearth of high quality opportunities was largely a function of the difficult economic conditions, which caused a lot of groups that Pathway anticipated to back in 2009 to push off their fundraising efforts. In some cases, the market-related decline in investment and exit activity pushed out the need for a next fund. In other cases, groups just decided it would be better to sit on the sidelines and wait for fundraising conditions to improve before testing the waters. Even though commitment activity was down in 2009, Pathway still reviewed 391 opportunities.

MR. LEW said that Pathway is targeting \$125 million in commitments to invest in up to 14 partnerships for the ARMB portfolio this year. The target ranges for each strategy are unchanged from last year's plan. Investment sizes will generally range from \$10 million to \$20 million. As of today, they have committed \$10 million to a multi-stage focused venture capital fund.

MR. O'LEARY inquired if the operative constraint on the bite size of commitments was the diversification goals for the ARMB portfolio or the limited capacity related to Pathway's \$21 billion in assets under management. MR. CHAMBLISS replied that the inability to get the full ask in a fund is primarily driven by the general partner's desire to limit certain limited partners. However, after eight years, a significant portion of the funds that Pathway is investing in for the ARMB are existing relationships where they are getting the full bite size. The issue comes up maybe once or twice a year, when Pathway is interested in getting a toehold investment in what they believe is an exceptional opportunity.

MR. LEW stated that Pathway will continue to adhere to the long-term target ranges by strategy and geographic region, while maintaining flexibility in the short term so they can capitalize on the highest quality opportunity in the marketplace at that time. The pipeline of quality opportunities is very slowly beginning to pick up and is expected to increase in the latter half of 2010. Any continued delays in fundraising, such as experienced in 2009, could result in Pathway not investing the full \$125 million target commitment.

MR. RICHARDS asked if there were any investments that did not need any more capital to begin with but they have run dry because of the economic down turn and now need an injection of capital. MR. CHAMBLISS said yes, that Pathway devotes a portion of the

portfolio to partnerships that focus their strategy on turnaround or troubled situations, whether it is in the distressed debt pocket or the special situations pocket.

MR. RICHARDS asked if Pathway expected increased activity in that category or if it would be new projects. MR. CHAMBLISS said there will be increased activity in troubled situations, such as corporate carve-outs of troubled parents. Six months ago he would have expected more of that, but the credit markets have opened up and allowed companies a little more flexibility in their debt. So at least for the near term there will not be as much activity as Pathway originally expected during the depth of the financial crisis.

MR. LEW presented the ARMB portfolio update as of September 30, 2009 — a total of \$1.075 billion committed, \$687.9 million or 64% of which has been contributed. These contributions have grown to \$825 million in total value, generating a since-inception internal rate of return of 10.3%. He stated that Pathway is in the process of finalizing the year-end numbers: contributions will rise to \$713 million at year end, and the total value is expected to increase by about \$60 million and reach \$884 million. That would boost the since-inception internal rate of return to around 11.5%.

MR. CHAMBLISS stressed that in 2009 Pathway was very active in managing the underlying portfolios and meeting with general partners. There were 40 managers in the ARMB portfolio, and during the year Pathway had 180 either face-to-face or teleconference meetings with the general partners.

MR. LEW reviewed the portfolio's investment strategy diversification at the partnership level, noting that there is attractive sub-diversification within each of the major strategies. He also presented graphs of the diversification at the underlying portfolio company level. While Pathway expects the acquisition category to represent a majority of the portfolio, they also expect the venture slices to grow over time. There are 13 industries represented in the portfolio, and no single industry represents more than 18% of the portfolio's total market value. Sixty-nine percent of market value is spread fairly evenly throughout the United States, and the remaining 31% is outside the U.S. in 30 countries, primarily in Europe. A roughly 70%/30% mix is appropriate right now, and the areas of non-U.S. investments are the markets that Pathway believes are the most suitable for private equity investment.

MR. LEW stated that annual contribution activity in the portfolio fell sharply in 2009 to \$69 million, a 50% decline from 2008 and a 58% decline from 2007. Investment activity dropped in all strategies, most notably in the acquisitions category. Contribution activity appears to be picking up in 2010, but it is hard to peg where the year will end up based on one quarter of activity.

MR. LEW remarked that the annual distribution activity was the same story as

contributions. Distributions in the portfolio fell to \$36 million in 2009, a 66% decline from 2007. Things picked up late in 2009 when the fourth quarter distributions exceeded that of the first three quarters combined. During the first quarter of 2010, distributions came in at \$18 million, a modest decline from the fourth quarter amount but still well ahead of the first three quarters of 2009. This indicates that the large increase in distributions in the fourth quarter was not an aberration and gives some reason to think that distribution activity in 2010 will exceed that of 2009.

MR. LEW reviewed performance for the one-year period ended September 30, 2009. The portfolio generated a net loss of \$60.7 million and a one-year return of -10.9%. The fourth quarter of 2009 is shaping up to be the strongest quarter of the year, with over \$34 million in gains expected. If the performance period was advanced to year end, the 2009 one-year return would swing from -10.9% to +11.2%. Given everything that happened in 2009, it is surprising that the year will likely end with the same since-inception return as it began with.

MR. LEW also presented the vintage year performance, noting that 2006 is the vintage year most challenged by the recent economic down turn. However, the partnerships in that year remain young, with an average age of 1.9 years, and over 25% of their capital has yet to be put to work. Also, a vast majority of the losses from the 2006 vintage year are unrealized and expected to improve. The 2007 and 2009 vintages are off to a promising start and have significant dry powder to deploy. If performance was advanced to year end, the 2007 vintage year would move to break even, while the 2008 and 2009 vintage years would actually be valued above cost. That is a nice early result, given the J-curve effect typically associated with less mature funds due to the drag of fees on performance.

MR. WILSON noted that the top quartile performance for the 2006 vintage year was break even, and he wondered if it was a challenging year for everyone. MR. CHAMBLISS confirmed that it was. He advised to wait and see, because with only \$12 million distributed of the \$178 million committed in 2006, Pathway views it as quite immature. He did not think that the benchmark for the 2006 vintage year was very reflective of where it would be in three, four or five years.

MR. CHAMBLISS displayed a slide of the portfolio performance by investment strategy. He said the portfolio is doing well across all the metrics. When the Board started investing with Pathway in 2002 it was post tech bubble, so there were not a lot of venture funds raising money through 2004. Pathway did not begin committing to venture funds in earnest until 2005, so the venture capital portfolio is a little less mature than the other strategies in the portfolio, and the performance is a bit below the other areas. Pathway believes the restructuring/distressed debt strategy is very appropriate for a partnership portfolio, such as the ARMB, for two reasons. It is counter-cyclical to the other equity partnerships the ARMB is invested in, so a good diversifier. And experience

has shown that the portfolio can earn equity like returns by investing in high-quality distressed debt funds. From September 2008 to September 2009, every single sub-strategy in the ARMB portfolio was negative, but distressed debt was positive. Coming out of that climate, it was a great opportunity to take advantage of some underpriced and undervalued distressed debt in the marketplace. That explains the 42.8% return in the distressed debt portion of the portfolio.

MR. CHAMBLISS reviewed the net performance relative to public and private market indices. He noted that as of September 30, 2009, the ARMB portfolio's 10.3% net IRR since inception outperformed the benchmark of the Russell 3000 Index + 350 basis points by almost 800 basis points. That return also significantly outperformed the Venture Economics Private Equity Index. The preliminary 2009 year-end net return since inception is 11.4%, while the portfolio benchmark generated a 4.3% net return over the same period.

MR. CHAMBLISS thanked the Board for its confidence in Pathway over the past eight years. He said they continue to invest in the best private equity funds in the world on the ARMB's behalf, and they manage those funds and follow them closely. The portfolio has performed well to date on a relative and absolute basis, and it is well positioned to continue to perform well going forward.

CHAIR SCHUBERT thanked the gentlemen from Pathway for the presentation.

LUNCH BREAK

CHAIR SCHUBERT called a lunch break at 11:59 a.m. The meeting resumed at 1:15 p.m.

REPORTS (Continued)

10. Actuarial Valuation Review for 2009 Certification of Draft FY09 Actuarial Valuation for PERS/TRS and NGNMRS and JRS Roll Forward Analysis

MR. BADER explained that Senate Bill 141 that created the Alaska Retirement Management Board contained a requirement that a second actuary must review any actuarial data reported to the Board. Gabriel Roeder Smith & Company (GRS) provide that service to the Board.

[A copy of the GRS slide presentation is on file at the ARMB office.]

LESLIE THOMPSON of GRS said she reviewed the roll forward of the Judicial Retirement System (JRS) pension and health plans and the National Guard and Naval

Militia Retirement System (NGNMRS) pension plan. The numbers from the prior valuation were rolled forward by the primary actuary Buck Consultants, rather than having an extra data set collected and valued separately. A roll forward is a very common approach in estimating numbers from year to year. GRS actually replicated the entire roll forward process and submitted a letter of findings. There were two minor things: a sign change on a number, and two numbers that did not add correctly. Buck then made the necessary changes, and GRS matched the roll forward results for those two plans.

MS. THOMPSON said the second item to report was the actuarial audit of the June 30, 2009 valuations of the State of Alaska Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS) pension and post-employment health care plans. She drew attention to the summary report card (page 4 of April 9, 2010 report) that listed the items that have been under review in the last three GRS audits. Every item that GRS has brought up over the last three years has been resolved. The two red x's are items where GRS is in agreement with Buck that they are de minimus, but Buck's systems cannot accommodate the level of change that GRS has recommended in its reviews. These are not material items.

MS. THOMPSON described how GRS ran their own valuation estimates on some test lives received from Buck and that they nearly matched to the dollar on the liabilities for both the PERS and TRS pension plans. At this point, the audit is producing very favorable results. There is a little more disparity on retiree medical, but it is well within normative limits. Retiree medical has so many more moving parts than the pension plans that it is harder to get an exact match. But everything looks clean on both the pension and retiree medical plans.

Addressing potential areas for future review, MS. THOMPSON stated that GRS took a look at the history of the PERS gains and losses by source, and they saw an interesting phenomenon. On the retirement system, all the sources of gain or loss are losses. That means the plan population is behaving in a way that creates a loss to the plan. Second, there is a large gain on the medical sources of gain or loss. Her interpretation, which is one of several possibilities, is that the medical gain is hiding the pension plan losses. Net-net there is a gain in the valuation for each of the last four years. If the pension and retiree health care plans were looked at separately, neither plan would be acceptable in terms of the magnitude of their gains and losses or the consistent bias.

MS. THOMPSON recommended conducting an experience study so the assumptions get into alignment so that their expected value is closer to zero. If the persistent bias is losses, it will mean upward pressure on the contribution rate. If the persistent bias is gains, one could draw the conclusion that too much is being contributed to the plan. She said she had spoken with Buck Consultants about this last week, and she understood that an experience study was currently underway.

Responding to MR. PIHL about the size of the retirement losses, MS. THOMPSON said it was \$6.4 million in the 2010 valuation.

MR. RICHARDS observed that the "Other" source of gain or loss to the plan was \$22 million in the 2010 valuation. He asked if the "Other" category consisted of a lot of little items or if it was actually a little category but, because it is so little, it is hard to estimate it, therefore, it has a big variance.

MS. THOMPSON replied that the actuary would have to answer why the "Other" category for PERS is so big. But, in working with her own clients, she advises that "Other" should be the smallest category of all, because she should be able to eliminate all the things that are easy to figure out. Examples of things in "Other" are election rates for joint and survivor or subsidies for joint and survivor benefits — any type of benefit that is not being explicitly valued in the valuation process. She would expect "Other" to be tiny relative to the other sources of gains and losses. What could be happening is that "Other" is actually a concurrence of events — someone could have a much higher salary increase than assumed so they end up retiring with a much higher benefit. The question would be whether the actuary considers that a retirement loss or a salary scale loss. Her suggestion is that the Board should expect the "Other" category in the annual gain/loss by source to be the smallest one on the list, not one of the largest ones.

MR. JOHNSON asked if GRS had any insight into why there were consistent biases in the PERS gains and losses by source, and if GRS had asked Buck if they had any explanation for it. MS. THOMPSON replied that Buck is aware of this and is currently reviewing it as part of the experience study underway. She added that, for example, a loss on termination is because people do not leave employment. There has been a consistent loss on termination year after year. Five years ago, when the Board last set the assumptions, no one knew about the meltdown in capital markets, and no one knew the impact that that would have on the workforce. An anomalous event happened that created anomalous experiences, but she doubted that anyone could know the actual reasons. It is just uncanny that it is happening for the PERS system in nearly every category. The losses on salary are occurring because the pay increases are exceeding the assumed pay increase rate.

COMMISSIONER KREITZER said she had wondered about these things in addressing worker retention for the State through increased salaries, knowing that people would probably not retire because their SBS or other accounts were not where they wanted them to be. She thought there were a lot of things pointing to this outcome, and she was interested in hearing how Buck will address it. She said she has tried to publicly say all the things that the State is doing, and she is surprised that it is a surprise to others that an arbitration award of 5.5% in a year and the assumption that payroll will increase 4% would not be considered.

MS. ERCHINGER said another issue related to expected salary rate increases going forward is that employers implementing defined contribution plans may possibly have to raise salary levels to attract new people into the system. Because the PERS system works on one pay plan per employer, it necessarily raises the salaries for everybody else in the system. She thought estimates for salary adjustments would have to err on the high side in the future for that reason.

COMMISSIONER KREITZER indicated she doubted that the state's largest employer was creating higher salaries because of the defined contribution plan. When she became Department of Administration commissioner in 2007, she found that state employee salaries under the defined benefit plan were not keeping pace. However, the municipal level has been giving salary increases all along. Now that the State has finally been able to increase some salaries, it may be putting some additional pressure on the municipalities that had been attracting state employees. The State has now done a salary survey and has a much better idea of its position as a competitor.

MR. TRIVETTE remarked that retired public employee associations have done medical surveys over the years, and he knew that a sizeable number of retirees have other medical plans and do not use the state's retiree health plan. Second, he understood that Buck was estimating the number of people who were not covered by Medicare Part A and Part B. He asked if there was a source for getting better numbers instead of just guessing.

MS. THOMPSON stated that in the past Buck "guesstimated" the ratio of the pre- and post-65 group, but they are able to get data on that now and can value that critical component in retiree benefits more precisely. The claim costs for retirees that are Medicare Part B only are very high; even though it is a small part of the retiree population, it is certainly one where claim volatility dances around a lot.

MR. SHIER explained that shortly after he joined the Division of Retirement and Benefits a question came up about the total spend for retiree health care and whether it was the pre-65 group that was driving the cost or not. In fact, because people are living so long, the largest amount of spending from the retiree health trust will be for those who are post-65, even though it is secondary to Medicare. That is because people are in the post-65 age group for much longer, and that will become the overwhelmingly largest group. Buck Consultants has done some work lately in looking at Medicare Part B and Part A, and Medicare Part D and the Retiree Drug Subsidy Program, trying to determine the proper approach and how to find ways to maximize the federal underpinnings for those who are past age 65.

MS. ERCHINGER referenced a sentence on page 13 of the GRS report: "Because PERS and TRS are closed to new members, eventually the asset allocation may need

to be adjusted to reflect cash flow needs. This should also be considered in the next asset allocation and experience study." She asked at what point in the future the asset allocation should be adjusted.

MS. THOMPSON said she works with another state that has a closed plan, although much smaller. That plan is running out of assets, and what has come to light is how much better it is to plan far in advance for a closed plan. Most people understand the asset allocation part and not to tie up assets that are needed tomorrow. But a plan can only pay benefits out of the market value of assets; it cannot pay out of the smoothed value of assets. The experience study piece is to ask when to really look at the funding method and that assets need to equal the present value of benefits. Alaska is not anywhere near that now.

MR. PIHL asked if GRS was comfortable with the funding ratio and the \$2 billion of deferred loss recognition. MS. THOMPSON said she was very comfortable with the efficacy and the safety for the retirement plan of smoothing the losses over five years. She added that there is no question that the deferred loss is a big number; if the plan was closer to having four actives and 40,000 retired, she would be very uncomfortable, because there would not be enough time horizon to recover. She anticipated a recovery long before the plan is truly an all-retiree plan.

In closing, MS. THOMPSON stated that the retiree medical assumption is acting in the opposite direction, which is creating a large enough gain that the sum total of the PERS gains and losses year by year has always been a gain. That makes this a good time to fix everything and get each assumption predicting itself.

MR. PIHL complimented Ms. Thompson on her report and presentation, which he thought was superbly done.

11. Adopt Asset Allocation

Resolution 2010-05:

**Defined Benefit PERS/TRS/JRS
PERS/TRS/JRS Retiree Health Trusts
Retiree Major Medical Health Insurance Fund
Health Reimbursement Arrangement Plan/PERS Occupational Death &
Disability Fund**

Resolution 2010-06:

Defined Benefit NGNMRS (Military)

Resolution 2010-07:

Defined Contribution PERS/TRS Holding Accounts

MR. BADER stated that each year the Board adopts an asset allocation for fiscal year 2011. The asset allocation is based on the capital market assumptions provided by Callan Associates at the ARMB's February meeting. Subsequent to that meeting, he met with Mr. O'Leary of Callan, and Dr. Jennings, George Wilson, and Dr. Mitchell of the Investment Advisory Council to discuss the asset allocation and a recommendation to the Board.

MR. BADER said the capital market assumption changes were minimal this year compared to the capital market assumptions the Board acted upon last year. Staff was recommending one asset allocation for the PERS, TRS and Judicial retirement plans and several other accounts listed, and a separate asset allocation for the military retirement system.

The differences between the current asset allocation plan and the one proposed for FY11 are to decrease domestic equity by 1% and increase international equity by 1%, and to decrease fixed income by 1% and increase cash by 1%. Regarding Ms. Erchinger's earlier question about when was the time to change the asset allocation and acknowledge the need for cash, MR. BADER said the ARMB would be beginning that process in this asset allocation. Second, the proposed asset allocation takes into account that each year the Legislature has appropriated a large amount of money to supplement the retirement plans. Staff and advisors believe it is in the plans' best interest to hold some of that appropriation in cash, rather than putting it into investments that have to be sold a month or so later to raise cash, thus incurring transaction costs. The cash allocation has been set at 1%, but staff does not intend to necessarily hold it at 1% throughout the year.

MR. BADER stated that staff is also mindful that a good part of these plans will be terminating in the coming years. The assets are pooled, so that while the PERS and TRS tier I and tier II retirees may be fading from the scene over time, the health care components of the defined contribution plan are defined benefit type liabilities, and the ARMB will not be out of the DB-type investment business.

MR. BADER referred to Resolution 2010-05 in the meeting packet that laid out the asset allocation for the Public Employees', Teachers' and Judicial Retirement Systems; Public Employees', Teachers' and Judicial Retirement Health Trust Funds; Retiree Major Medical Health Insurance Fund; Health Reimbursement Arrangement Fund; PERS Peace Officers/Firefighters Occupational Death & Disability Fund; and the PERS, TRS, All Other Death & Disability Fund, effective July 1, 2010. Resolution 2010-06 established the asset allocation for the Alaska National Guard and Naval Militia Retirement System, effective July 1, 2010. Resolution 2010-07 laid out the asset allocation for the PERS and TRS Defined Contribution Holding Accounts, which was essentially the cash allocation.

DR. JENNINGS commented that where the trustees do not see any change in the asset allocation, it does not mean that staff, the consultant and the advisors did not discuss things thoroughly. They debated some of the numbers and then ended up at the same spot as the current asset allocation.

MR. O'LEARY stated that last year was the first time where the expectation for the total retirement fund return exceeded, on a longer-term basis, the discount rate currently in use. That was because values were so depressed at the time the 2009 capital market assumptions were developed that the return projections were quite high. This year the projections were reduced to more normal levels. The consequence is that the long-term return will likely be below the discount rate. The primary driver is a difference in the long-term inflation assumption; the long-term inflation assumption embedded in Callan's projections is 2.75%, which is 75 basis points lower than that used to develop the estimate of the liabilities.

MR. O'LEARY said this is an environment of incredible public debate and criticism about the reasonableness of the discount rates that are being used. As a follow-up to Buck Consultants' presentation at the February meeting he asked Callan's research people to prepare an expansion of what they did with regard to embedded real return projections. He hoped that work would be completed before the next board meeting. He wanted to make sure that the Board had considered this and understood the differences in the critical assumptions that are going into the choice of an investment policy, and the reasonableness of the set of actuarial assumptions that have been used to develop the contribution rates and future liabilities.

MR. WILSON related that the advisors, Mr. O'Leary, and ARMB staff had a lively debate on asset allocation, as they always do. In his time on the IAC, the consistent message has been that this is the most important decision that the Board makes on a regular basis. The most debated topic continues to be the difference between domestic and international equity. There is a wide range of opinions on the matter, from having a heavy overweight to the U.S. economy, to a number of endowments in the Northeast actually splitting their portfolio into thirds. The proposed asset allocation continues the gradual move the ARMB has been making over the last couple of years. Right now, the markets are about 43% U.S. and about 57% international - including emerging markets. The ARMB asset allocation will be about 56% domestic, so roughly a 30% overweight relative to the world indices. The IAC felt that moving 1% from domestic equity to international was a gradual move closer to the world indices.

COMMISSIONER GALVIN stated that he served on both this board and the Alaska Permanent Fund Board. The APFC board spends a lot more time in philosophical discussions about the investment policy, how it relates to the mission of the permanent fund, the role of risk tolerance, and the extent to which the board can anticipate where it

should place its asset allocation in the context of that risk profile. He said that among the decisions that this Board has to make, it should pay particular attention to this one decision. He appreciated, maybe more than some trustees, the amount of work that goes into the staff bringing an asset allocation recommendation to the Board. For that reason, he was overall very comfortable with what staff was recommending. However, he believed it was incumbent upon Board members to look at the underlying assumptions that the staff used in reaching the recommendation to determine if the Board felt they were the appropriate ones in terms of both long-term expectations that individual board members have about the risk tolerance that the Board should adopt and the volatility over the last 24 months, and the realization at different times about the vulnerability to things that people do not understand or control, and the Board's responsibilities to the beneficiaries that rely on the Board to protect their assets, as well as to try to provide some growth.

COMMISSIONER GALVIN said that for that reason he thought the Board needed to spend a little time looking at some of the trade-offs that are inherent in the different asset mixes that staff analyzed on the efficient frontier to determine what they would recommend. For example, the mixes on either side of the ARMB 2011 recommendation show some of the tradeoffs that are inherent in asset allocation decision-making. Moving from the recommended mix to Mix 4 drops the expected return but also drops the projected standard deviation from that return. Moving the other way from the recommended mix to Mix 5 increases the expected return and also raises the expected volatility of that return. As Board members representing the various constituencies, the decision with regard to asset allocation is trying to balance a combination of different factors. If the Board were to take a less aggressive asset mix, it would have ramifications on projections of the unfunded liability, the Legislature's role in filling that, or the sense that the ARMB was contributing to it in its decision-making. On the other hand, the Board would be providing a bit more confidence in the expected return because the asset mix would be moving toward assets that have less volatility. This could give some constituencies a greater sense that the Board recognized their concerns.

COMMISSIONER GALVIN said he wanted to take a minute to make sure that the trustees were all thinking through the choices before them. While staff has provided what they believe is the best asset mix to reflect what *they* think the Board has decided is the risk tolerance, the trustees are the ones who make that decision. He said it is not a repudiation of staff's recommendation for the Board to say it had changed its mind about what risk profile it wants to set for the asset allocation. He wanted Board members to take that to heart in making the decision so that this asset allocation was the one they believed properly reflected their balance of responsibilities.

MR. PIHL indicated he was comfortable with the process, noting that the Board had a long discussion about asset allocation at the February meeting. Referring to the ARMB

2011 asset mix expected return of 8.07% versus the 8.25% discount rate, he said he understood the difference was accounted for in the Callan inflation assumption of 2.75% compared to the actuarial inflation assumption of 3.25% used to calculate the discount rate.

MR. TRIVETTE also stated that the Board spent quite a bit of time on this at the last meeting. He said he took time last weekend to review Mr. O'Leary's presentation and to read the February minutes carefully. If he had not been part of that discussion, he would probably be recommending that the Board wait until the next meeting to take action on the asset allocation. He recalled it being emphasized at the time the Alaska State Pension Investment Board was transitioning to the Alaska Retirement Management Board that probably the most important thing the Board would do every year was the asset allocation decision. He firmly believed that, and was comfortable in voting at this meeting.

MR. PIHL moved that the Alaska Retirement Management Board adopt Resolution 2010-05, Resolution 2010-06, and Resolution 2010-07, relating to asset allocation. MR. RICHARDS seconded.

Roll call vote

Ayes: Erchinger, Galvin, Kreitzer, Pihl, Richards, Trivette, Williams, Schubert

Nays: None

The motion passed unanimously, 8-0. *[Trustee Harbo was absent.]*

CHAIR SCHUBERT thanked Commissioner Galvin for his reminder about the Board's focus.

12. Performance Measurement - 4th Quarter

MICHAEL O'LEARY, Executive Vice President of Callan Associates, Inc., presented the calendar 2009 investment performance for the retirement funds. *[A copy of the Callan presentation slides is on file at the ARMB office.]* He said the defined benefit programs had excellent absolute returns but weak relative returns for the full year. The weak returns compared to peers were primarily attributable to the valuation lag for the illiquid assets real estate and private equity. That valuation lag works to the retirement fund's benefit in some years, such as 2008, and is a detractor in other years. The participant-directed programs, almost without exception, had very competitive performance during 2009.

MR. O'LEARY gave a synopsis of the market for 2009, as follows:

- December was another good quarter for the stock market, making it three quarters in a row. The S&P 500 Index was up 6.04%, and the EAFE Index was

up 2.18%. For the full year, when measured in dollar terms, the EAFE Index was up almost 32%, as opposed to the 26.5% for domestic equities as measured by the S&P 500. Looked at in local currency terms, the EAFE was up 24.7%. The dollar was weak over the full year, but it changed course late in 2009. That has continued, so in the March quarter the stronger dollar was a detractor from performance.

- The high yield bond index was up 58% for the year, which was absolutely extraordinary.
- At the other end of the spectrum, government bonds had a negative return for the December quarter and the full calendar year.
- Private real estate was down just under 17% for the year, as measured by the NCREIF Index, and it also posted a loss in the fourth quarter. Callan's total private real estate database was down 28.5% for the year. Real estate investment trusts (REITs) had a strong recovery - up about 30%, which helped the ARMB portfolio.
- Emerging markets enjoyed extraordinary returns, with the MSCI Emerging Markets Index up 79% for the year.
- Hedge funds recovered during the December quarter and the year. Callan's hedge fund-of-funds database was up just under 13% for the year. The Credit Suisse Tremont Hedge Fund Index was up over 18.5% for the full year; that index includes a lot of very aggressive hedge funds.

MR. O'LEARY referred to the Callan periodic table of investment returns by major asset category and pointed out some of the dramatic changes between the 2008 and 2009 returns. Another graph of bull market comparisons showed the duration of the average bull market has been 68 months; the current bull market has lasted 10 months. He said if this is going to be a protracted market recovery, there is plenty of historical precedence that it could last longer. But just because that has been the case historically is not reason to rely on it now. There are many who would understandably say that the recovery from March 2009 through today has been an incredible run, and how much more could there be.

MR. O'LEARY quoted the title of a speech he once heard, "Now is always the most difficult time to invest." He said people think we are in the midst of a recovery, they are confident that interest rates have to go up, and they know taxes are going to go up (just with tax cut term limits expiring). Rising interest rates and higher taxes historically are not good for stock investments. There is no certainty that the economic recovery is going to continue, given the inability to get more people working and the low top-line growth. He counseled the Board not to get caught up in how great 2010 first quarter profits were: inventories got depleted in the recession so some inventory rebuild was very profitable because capacity was so under-utilized. A year ago, the mentality was about writing down everything, as the Board heard about earlier from its private equity managers. That mindset has changed. So things are definitely much better in the

economy, and Callan believes it will continue to get better, but they counsel moderation in that expectation.

MR. O'LEARY had a graph of the NCREIF capitalization rates for current transactions compared to the cap rates embedded in the NCREIF index for appraisal valuations. While there have been very few transactions, there is a substantial spread between the rate at which properties are changing hands and the cap rates used for valuation. Income from real properties has continued to diminish; it looks like that may be getting near an end, but further declines are probable. Looking historically, commercial real estate has experienced worse environments.

MR. O'LEARY reported that the March 2010 quarter was a strong quarter, particularly for domestic equities relative to international equities, much of that attributable to the trend in the dollar. The Barclays Aggregate Index had a 1.78% return, which is good for a quarter. The high yield index was up over 4.5%. The Treasury yield curve was incredibly steep at the end of last year; the policy of keeping interest rates low has been a huge recapitalization the banking industry. The near-zero short-term interest rate is not a condition that can persist when the inflation rate is 2.0%+.

MR. O'LEARY reviewed the retirement fund asset allocation, using the PERS system as the illustration. Everything is very close to the target allocations, with the overweightings being in the equity sectors. He said Mr. Hanna earlier addressed how the overweighting in private equity came to be and how staff is addressing it. Another graph showed the retirement fund asset allocation compared to other public funds. He noted that some public funds have unusual investments they categorize in ways that make sense to them but do not lend themselves to this type of analysis. He explained that if you mentally combine global equity ex-US and domestic equity, the ARMB's equity allocation is quite high compared to others, and the fixed income exposure is comparatively low. That is consistent with an expectation that, if economic growth is rewarded, the ARMB should do better than average because it has taken on a higher equity profile. Some of that is embedded in the "alternative" category, which is where the private equity and hedge fund-of-funds reside.

MR. O'LEARY said Mr. Wilson had mentioned the ongoing debate about the right amount of domestic versus international equity; some funds have gone toward equality, and some funds are using a broad global equity benchmark as their frame of reference. The ARMB, with 10% less in international equities than in domestic equities, is nonetheless in the 14th percentile of a broad universe of other public funds in terms of its international exposure. The retirement fund has a significant tilt toward international, even though it is significantly less than that which is embedded in the broad global equity market index.

COMMISSIONER GALVIN asked if the Callan public fund database was only retirement

funds. MR. O'LEARY said the database was dominated by retirement systems, but the Permanent Fund was included in it. One debate is about whether a capitalization-weighted index is the right frame of reference. For example, if emerging markets kept going up at 80% a year for five years, they would be a bigger portion of the capitalization-weighted index — but would public funds want to load up on emerging market equities after they did that? There are other ways of thinking about diversification schemes, such as some sort of fundamental measure of economies that are traded. For decades, Germany was a small public market but it was a huge economy. So if an index had been weighted based on GDP, it would have had a tremendous weight in Germany, even though the public markets would not have been able to support it.

COMMISSIONER GALVIN stated that although the APFC and the ARMB are somewhat sister organizations in the State, the analysis of the returns fails to recognize the distinctions in the overall purposes of the two funds. He said he was quite concerned about the sense that both funds are structured similarly in terms of the asset mix, and tilted toward a prosperity driven bet, as Mr. O'Leary pointed out. From an overall State perspective, people should think about whether the combination of the two funds basically tilted in the same direction is in the State's overall best interest — because at the end of the day there is a certain amount of cross responsibility that is going to play out if it becomes a situation where the State needs to cover all its obligations. The two funds are chasing the same goal independently and perhaps, at the end of the day, too independently.

MR. O'LEARY commented that the point has already been discussed that sometime in the next while the asset allocation for the defined benefit programs will have to begin to evolve toward a less aggressive structure because of a changing liquidity situation. A clear implication as that situation becomes more foreseeable is that the expectation of what the balances from that point forward will earn will have to be adjusted to the then-current environment. He thought that was a long way away, in large part because of the magnitude of the contributions, the funding schedule, and the many years of work left for a large number of the participants.

CHAIR SCHUBERT asked Commissioner Galvin to expand on his comment about the ARMB and APFC funds operating independently. COMMISSIONER GALVIN said that while the Treasury/ARMB investment staff and the APFC staff communicate and work together as much as they need to, certain separation is appropriate, and there is some inherent competition. As a member of each board, he tends not to bring too much baggage from one to the other. Both boards retain Mr. O'Leary of Callan Associates as their general consultant: that brings continuity, but it also brings a certain shared frame of reference. The Permanent Fund Board is in the midst of a transition in the way it looks at the asset allocation decision-making and the types of information that it uses to inform itself in making that decision. Except for the annual education conference where

the two boards come together, the funds do not spend a lot of time comparing notes at the board level about what they see as the respective roles of the two in terms of managing the funds. Another aspect is the \$16 billion in the Department of Revenue that he, as the DOR commissioner, makes decisions in managing. No one has tried formally or informally to bring some of this together, and part of it is just evolution. Assets are growing, and it will reach a point of having to look at the overall purpose and cross-purposes of the four pots of money (retirement funds, permanent fund, constitutional budget reserve, and general fund) and their investment strategies. He said he was offering this as an initial observation for when the Board is listening to Mr. O'Leary's comments about the retirement fund's tilt one way or the other, to understand that to the extent the funds are independently tilting in a particular direction, just like in any other diversification idea, if the other half of the State's assets are tilting in the same direction, for reasons that are independent, it is not diversifying the State's risk. In fact, it is the opposite. That may be appropriate, for reasons that have to do with the funds' different obligations. But the boards should not ignore it and should try to bring the conversation together in a timely manner, as opposed to having it thrust upon them.

MR. O'LEARY commented that, as someone who works for both funds, the mindset he puts himself in for each client is what the board's fiduciary responsibility is. The ARMB's fiduciary responsibility is very clear — acting for the benefit of the participants in the plans.

COMMISSIONER GALVIN said his struggle is with the question that within the framework of the fiduciary responsibility to the participants there is a simultaneous responsibility that is inherent in dealing with the Legislature and its responsibilities in funding the programs and so forth. The two cannot be separated, because one is inherently going to impact the other. Similarly, how the permanent fund is managed, and how the constitutional budget reserve is managed, and how the general fund is managed, fall into that same dynamic.

MR. O'LEARY said the longest-term pool of money in the State is the permanent fund, and its stated target is to preserve and enhance the purchasing power of the corpus of the fund by a fairly aggressive target of 5%. The liquidity calls are highly variable because they are a function of shorter-term earnings. At the other end of the spectrum is the contingency reserve money in the Department of Revenue. The pension programs are very long term in orientation but definitely finite, particularly when membership in several tiers is closed. These defined benefit-type assets still have a very long investment horizon, so it is appropriate for them to invest for growth. The individual account programs have components to them that are defined benefit-like, which have a long investment horizon, as do the health-related assets. It is appropriate that the executive and legislative branches be thinking about all these things in some type of combination.

COMMISSIONER GALVIN mentioned Mr. O'Leary's earlier comment that the ARMB tends to be overweighted to equities versus fixed income in the Callan public fund peer group. He asked how closely correlated ARMB was to the peer group, given that the Alaska retirement system participant makeup is primarily younger, and the systems are tilted toward contributions instead of distributions. He asked if it was appropriate for ARMB to be weighed against the Callan public fund peer group.

MR. O'LEARY summarized the key differences between the Alaska retirement systems and other public funds. Alaska tries to fund the retiree medical liability and, as a consequence, the total funded status of the Alaska systems has historically been lower than others. Other plans may have had more flexibility in terminating old retirement plans and moving toward new tiers, which means their investment horizon would be shorter. Although the defined benefit portion of the Alaska retirement systems has terminated, the participation of active employees, and the expansion of the liabilities associated with the rest of their careers, has not terminated. His sense is that if other public funds took a holistic view of their liabilities, they would recognize that they are very underfunded.

COMMISSIONER GALVIN asked if not recognizing the level to which they are underfunded drives other public funds to chase less return and be more conservative in their asset allocation. MR. O'LEARY said he thought the leading state funds have been very aggressive in their policies. The higher variability and less-informed consideration is at the county and municipal level, where some of the funds are substantial in size.

MR. BADER observed that Callan's public fund database is a big database. He asked Mr. O'Leary to speak to what large funds do, because Alaska's retirement funds do not look so dissimilar to the largest pension funds.

MR. O'LEARY explained that if Callan did an asset-weighted distribution, Alaska would be more similar than dissimilar because of a comparatively small universe of mega funds. Callan slices its database that way, so they could send that information to the ARMB.

Returning to the performance presentation slides, MR. O'LEARY said the PERS fund beat the benchmark for the December quarter. The 12-month return was 13.28%, a good positive number, but it was below the benchmark return of 20.28%. The 12-month return was driven primarily by weak performance of both real estate and private equity, and much of the private equity difference can be attributed to the timing of valuations. Looked at over longer periods, it takes going out to five years to get respectable cumulative total fund returns relative to other public funds, and that is because of 2009.

DR. MITCHELL said he was looking at the Massachusetts Pension Fund as an example of what Mr. O'Leary categorized as a fairly aggressive asset allocation. It is not

dissimilar to the Alaska funds, with a little less in the equity markets and a little more in hedge funds. The results over the one-, three-, and five-year periods are not terribly dissimilar to the Alaska retirement funds. In both cases, the results are what one would expect, given the asset allocations.

COMMISSIONER GALVIN observed that the ARMB's asset allocation produced roughly 150 to 200 basis points on the positive side of the median in 2007 and 2006, but in 2009 the ARMB's return was almost 650 basis points below the median. So it was not a symmetrical relationship.

MR. O'LEARY confirmed that was an accurate observation. He said the wild card in the equation is the extent of recovery from the ARMB's specific real estate component, because real estate was a major source of drag on return. Some major, nationally noted public funds are not optimistic about recovery. Most of the private equity comments heard earlier seemed to be that this is largely just valuation-driven, not fundamentally driven. If one believes it is valuation-driven, it is easy to rationalize the recovery.

COMMISSIONER GALVIN asked what the time frame was for the Board to get a better picture on that. MR. O'LEARY said he would defer to Mr. Bader, but his answer was that it would be the end of 2010 before there is a clear picture on institutional real estate vehicles. It is already occurring on private equity. The real question is if there has been value destruction because of financing strategies.

MR. BADER referred to the -9.47% return for private equity for the trailing 12 months, a lagged return that was far below the S&P 500 return. He explained that staff did some work prior to the meeting, and of the last 20 quarters, if the returns were lagged one quarter, the ARMB outperformed the S&P 500 in 16 out of 20 quarters. Over five years, the ARMB private equity has outperformed the S&P by 10% (8% for four years, 8% for three years). The private equity managers have reported that they expect December 2009 to be a better quarter. There are significant lag issues for private equity in the trailing 12-month returns. He said he was confident that the ARMB's asset allocation is appropriate for the long run, and he was optimistic that by June it will manifest itself in the performance numbers.

MR. O'LEARY reported that the total bond performance for the December quarter, fiscal year, and one-year was very competitive compared to other public funds. The in-house bond portfolio compared to core managers did better than benchmark for the quarter, the fiscal year, and the year to date.

Large capitalization equities had a decent quarter and an okay year, right at median.

Small cap equities were slightly behind the benchmark for the trailing 12 months but look okay fiscal year to date. The trailing three-year return is near the benchmark.

International equities were median for the full year compared to other public funds, below the All Country World Index ex-US, and much better than the developed market index (EAFE). The ARMB's international developed market managers have underperformed the developed market index.

The emerging market equity pool, comprised of three managers, was up 72.9% for the year, which was poor relative to the benchmark. The longer-term performance has been better than the benchmark and peers. Capital Guardian was essentially at the benchmark, Lazard was up 70%, and Eaton Vance was up 62% (Eaton Vance includes some frontier markets and has a value orientation). In its global equity portfolio, Lazard was essentially at the benchmark for the year.

Mondrian's international bond portfolio had an excellent year relative to non-U.S. fixed income managers.

The real estate investment trust (REIT) portfolio was right on top of the index for the first six months of the fiscal year and is beginning to pull up the longer-term returns.

Crestline and Mariner, two of the three managers in the absolute return composite, beat their targets in the quarter and for the full year. Cadogan, the third manager, was in termination mode. Two other absolute return managers were hired in Cadogan's place, and their performance results will show up next quarter.

The high yield composite, consisting of Rogge and MacKay Shields, had a big underperformance relative to the high yield target for the year. They returned just under 39%, while the specific benchmark for them was up 57%. These managers did not go down as much in 2008 because they have a higher quality orientation.

MR. O'LEARY mentioned that Callan and the industry have been looking for ways to fairly evaluate target maturity funds, which have become increasingly important. As a byproduct, Callan has created peer groups by target date. They can show how the glide path for each of the target maturity funds compares to others. They can also show how each of the target maturity funds compares to other vehicles with the same apparent maturity. To the extent that over time there is greater general consistency in the glide paths among vendors, the relative performance will be useful.

Looking at the SBS funds, MR. O'LEARY stated that the Alaska Balanced Trust was up 15% in 2009, which was above the target. The trust has such a conservative asset allocation that it did not participate fully in the recovering market. The Long-Term Balanced Trust was up 21% for the year, which was also better than its passive target. The RCM Socially Responsible Equity Fund had a great year. The T. Rowe Price Small Cap Trust had a super year, and the last couple years' performance have pulled up the

long-term relative ranking.

MR. O'LEARY reviewed the list of Target Retirement Trusts, from 2015 to 2035. He noted that the big differences in the glide paths among the funds are the amount of equity exposure through time and whether equity performance was up or down.

Flipping briefly through the individual manager performances, MR. O'LEARY indicated that Callan has been talking to ARMB staff and the advisors about McKinley Capital; the new value managers seem to be doing well; and Relational (large cap value) was top quartile for the year, despite being bottom quartile for the last six months.

MR. O'LEARY said he had been brief in covering some of the slides but he was happy to answer any questions.

CHAIR SCHUBERT called a scheduled break from 3:11 p.m. to 3:26 p.m.

13. Lord Abbett - Small Cap Core Equity

KRISTIN HARPER, Director of Public Fund Services, and Client Portfolio Manager STACIA IKPE had been invited to present a report on the small cap core equity portfolio that Lord Abbett has managed for the Alaska Retirement Management Board since 2005. *[A copy of the Lord Abbett slide presentation is on file at the ARMB office.]*

MS. HARPER reviewed facts about the firm and noted that Lord Abbett had no layoffs in 2008; they cut some expenses but kept the people in place because it was the best thing for their clients. Since the ARMB hired Lord Abbett, it has been business as usual and the firm is the same, other than a few partners retiring and new partners being added.

MS. IKPE talked about the small cap core investment team, where the current composition has been in place for the last couple years: Dennis Morgan, who joined almost two years ago, is the newest addition. The portfolio management has the authority to hire another analyst, if they find someone who would be a good fit.

MS. IKPE reviewed the small cap core investment philosophy that the markets are inefficient, especially in small cap space. A combination of using quantitative screens to narrow the universe and doing the fundamental, bottom-up research to understand the companies is what provides the opportunities to pick the best high-return, low-risk stocks in the marketplace. There is a lot of focus on down-side protection in this portfolio.

MS. IKPE explained the small cap core investment process that starts with a screening for valuation on a 2,800-stock universe; is then screened for companies that have about a 10% growth rate; and, third, a quantitative screen for quality. The portfolio manager,

Michael Smith, and most of the analysts are visiting companies two to three days a week to understand the big picture of companies so that when something happens in the market they can determine what the impact will be on the companies. The investment team will develop price targets for the stocks and reward-to-risk ratios and then build the portfolio of 60 to 90 stocks.

MS. IKPE said it seemed strange to be apologetic about a 54% return for the one-year period ended 3/31/2010, but the benchmark performed even better at 63%. Lord Abbett continues to outperform for the three-year period and since inception. The lower quality companies drove the market in small cap space last year — the companies that almost went bankrupt in late 2008 and early 2009, when the credit markets froze. Micro caps did very well, as did the stocks that tend to trade under \$5. Since the March 9, 2009 lows through the end of March this year, companies without earnings were up 138%, while companies with earnings were only up 80%.

MS. IKPE presented the attribution analysis for the 12 months ended March 31. Lord Abbett underperformed by 9.3%; that was split between their sector decisions (a result of the bottom-up stock picking) and their stock selection. Last year was much more a function of what they did not own — the auto parts suppliers that almost went bankrupt and then were up 400%, and the homebuilders that were up significantly. Lord Abbett's focus was more on quality companies that they felt had the strength to manage through the down turn. While those companies did very well last year, they did not do as well as some of the alternative investments. From a sector perspective, Lord Abbett's underweight in the consumer sector hurt the most. In early 2009, people were losing jobs at a very high rate, investment accounts were down significantly, home values were down drastically, and people were continuing to worry about losing their jobs. So Lord Abbett thought the consumer was not going to be buying a lot, and they were very underweight the consumer going into the past year. Meanwhile, the consumer sector was up 100% last year, and it represented 10% of the index. That underweight was a very negative drag on performance for Lord Abbett. Energy was a sector where their stocks were up for the year, but their picks were up 50% versus the benchmark's 80% return.

Turning to the current positioning in the portfolio, MS. IKPE said Lord Abbett has a significant overweight to the benchmark in industrials. The industrial sector is a varied sector of manufacturing companies, trucking companies, air freight companies, and temporary staffing firms. Lord Abbett's view is that many manufacturing companies were quick to cut costs as the markets were going down, and they took write-offs that they would not have been able to take in better times. Lord Abbett believes that Wall Street is under-estimating the impact that these cuts have made on the companies, and they are focusing on those that really changed their business model. They also own a number of trucking companies, with the view that as production picks up, goods will have to be shipped. They have already seen some of those companies do very well this

year.

MR. BADER asked if the sector overweights and underweights were strictly a result of bottom-up portfolio building; in particular, how did a 10% overweight in industrials and a zero weighting in utilities happen? MS. IKPE said it is a result of the bottom-up stock selection process. They are aware of the benchmark, such that adding another industrial stock will take them even further overweight in that sector, but if that is the best opportunity, that is where they are going to go. If it happens that there are two great companies with equal returns, and one is an industrial and one is a consumer discretionary company — where they are underweight — they might chose to go with the company in the sector where they are underweight. It is not that Lord Abbett hates utility companies; it is more that they are finding much better reward-to-risk opportunities in stocks that are not utilities. A year ago they were probably 10% underweight in financials, and they have added there in community banks; they feel comfortable in being able to determine which small banks are going to do well and survive and which are not. They are focusing on banks that are very well capitalized in communities that have some weak banks that they can either buy directly or where they might benefit from some of the FDIC-assisted deals. There is a backlog of 200-300 banks that the FDIC is going to take over as soon as they hire the 500 or so people they need to do that process. The hope is that that will add some return to the banks, but even if the banks in the portfolio do not get any of these deals, they are still the strongest players in their communities and should gain market share.

MS. IKPE said Lord Abbett lightened up in health care last year, although they are still a bit overweight. As health care reform was going on last year, they tried to get out of any names that they thought might be hurt during the process. Now that health care has been passed, they are focusing on what companies will benefit from the increased volume, and they are lightening up on holdings in areas where they think there will not be as much innovation due to some of the health care implications.

MS. IKPE reviewed the characteristics of the ARMB portfolio, which at 3/31/2010 was valued at \$175 million. Lord Abbett tends to have a larger market capitalization than the benchmark; part of the bigger overweight now is due to shifting to higher quality small cap names in late 2008. That has also impacted performance, as the micro cap stocks, with a market cap of under \$500 million, were up about 123%, while the stocks with a market cap of over \$2 billion were only up about 40%. The Russell 2000 Index has about 25% of its weight in the micro cap stocks, and Lord Abbett has a little less than 10% invested in micro cap stocks.

MR. TRIVETTE asked who is looking at the health care legislation to determine which companies will benefit from it. MS. IKPE replied that Lord Abbett's analyst on the small cap team spent a lot of time in Washington in the past year, trying to understand the legislative implications. He is also able to draw on the expertise of three health care

analysts in the centralized research group for mid and large cap products. Lord Abbett buys research services, two of which focus on what is going on in Washington and the implication of that on various companies or industries. The firm also has a daily research meeting that is focused more on large cap names, but a member of the small cap team is usually there, as well, to get insight into what could impact the companies in the small cap portfolio.

CHAIR SCHUBERT asked what happened in 2006 that the ARMB portfolio had a return of 7.6% when the Russell 2000 Index was at 18.8% for the year. MS. IKPE explained that roughly a third of the underperformance was in owning a couple of homebuilders that had done very well in 2005 and prior; Lord Abbett held onto those companies a bit too long, not thinking that the housing market was going to fall off quite as quickly as it did. Four stocks really hurt the portfolio in 2006, but they were all bought out by somebody in 2007 at 30%-40% premiums — so over the period that Lord Abbett held them, those stocks were all very positive performers. The portfolio outperformed the benchmark in 2007 by over 10%, and the full year of 2005 was up by about 10% as well. Most years there is a handful of take-outs in the portfolio; 2008 and 2009 were very slow, but late in 2009 and so far in 2010 there has been some pickup in merger and acquisition activity.

In closing, MS. HARPER stressed that Lord Abbett wants to beat the benchmark and, despite being up 53% over 12 months, they were unable to do that in 2009. She said Lord Abbett appreciated the ARMB's business and intended to do right by Alaska the best they could.

14. Rogge Global Partners - High Yield Fixed Income

KEN MONAGHAN, Head of US High Yield Credit at Rogge, made a presentation on the high yield fixed income portfolio that the firm manages for the ARMB. *[A copy of Rogge's slides is on file at the ARMB office.]* He gave a brief update of the transition from ING Ghent to Rogge Global Partners, which took place on June 30, 2008. All ING clients and staff migrated to Rogge. All six senior members of the ING team have become Rogge shareholders, and all the back office services migrated to Rogge as of January 1, 2009, without a glitch. He said Mr. Bader visited the Rogge offices in New York in late 2009. Rogge has committed more resources to high yield, with the addition of two high yield analysts to the London team in the spring of 2009. The firm has about \$36 billion in total fixed income under management, and roughly \$1.5 billion of that is in high yield.

MR. O'LEARY inquired about how much in assets went to the new entity. MR. MONAGHAN said that just under \$1.5 billion of assets went into the new entity. During that time there was a decline in average high yield bond prices, but prices have moved up since then. The firm lost one client since moving over to Rogge, which was ING itself with about \$50 million in a mutual fund in Luxembourg. Some clients have given

additional money, and some clients have taken money off the table after the huge run up in high yield last year. Since the beginning of the year, Rogge has launched a global product and an offshore fund.

MR. MONAGHAN presented a flow chart of the high yield investment team: Rogge's total staff is 85 people, and the investment personnel number 35.

A review of the high yield market, including the outlook, came next. MR. MONAGHAN said in 2008 they were expecting the worst default rates in history for the high yield marketplace. It ended up not being quite as dire as people were predicting; still, it was a very nasty recession. After peaking at nearly 10% in the fourth quarter of 2009, default rates are expected to tumble to somewhere between 4% and 5% for this year, probably at the low end of that range. Global spreads, which were also hitting record peaks in the first quarter of 2009, have now tightened considerably. The lowest end of the credit spectrum, CCCs, is at best fair value in aggregate, and single Bs are reasonably priced. The sweet spot in the market right now is BB-rated bonds because the credits are a better quality in general and, over a longer period of time, happen to have better risk-return numbers. A lot of investment-grade buyers are buying more and more BBs because they are looking to augment their returns after having seen a collapse of investment-grade spreads.

MR. MONAGHAN stated that the survival and health of fallen angels (former investment-grade companies) will dominate returns for 2010, in particular AIG, which is still a large issuer in the marketplace, CIT, which went into bankruptcy but is now re-entering the index, and other troubled financial services companies. A number of the banks, including Citibank or Royal Bank of Scotland, for example, have their most subordinated tier one bonds in the high yield indices. Those are still trading at fairly healthy yield levels because those are bonds where the regulators have the ability to turn off the spigot if they choose, with no recourse to the bondholder. Rogge does not buy a lot of that paper, because they like a bond where, if the company misses a payment or decides not to pay back the principal, they have the option to go in and seize assets.

MR. MONAGHAN said one major positive in the marketplace is event risk. Event risk in the investment-grade market usually has a negative connotation, but it is usually positive in the high yield area because there are stronger covenants in the bonds. Rogge has seen a number of acquisitions: corporate America is feeling a bit stronger and more certain about its access to capital and is therefore going out and buying high yield companies. Two examples are the acquisition by a Scandinavian fertilizer company of Terra, whose bonds rose about 10 points on the back of that, and the announcement about two months ago by Walgreens of its decision to acquire Duane Reade, a New York City based drugstore chain. Rogge owns the bonds of both of those companies. The IPO market is starting to open, in particular for companies that went

through leveraged buyout several years ago. Two of them that Rogge owns a large position in include Metals USA and Ryerson; they are getting good price appreciation on both bonds on the back of the IPO. The companies are using the proceeds from the equity offerings to reduce their debt outstanding, which is good for the ratings and good for the fundamentals of the business.

MR. MONAGHAN said the new issue market will remain active and at an all-time record pace. Investment bankers are in the business of generating fees for themselves, and that is exactly what they are doing right now, issuing debt all day long. The companies are refinancing their existing bond obligations, extending out maturities, and retiring bank debt, all of which is a very healthy thing for companies to be doing. When the bond market is open like it is now, it is usually a good sign for the high yield market over time.

MR. MONAGHAN explained that the high yield market over time is about 40% BBBs, about 40% Bs, and about 20% CCCs. Rogge likes to refer to the CCC portion of the marketplace as the tail that wags the dog; CCCs are enormously volatile and peaked at over a 3500-basis-point spread over Treasuries in January 2009. That CCC portion of the market swung dramatically both on the way up and on the way down, and that generated a significant portion of the return, as well as a significant amount of the volatility. It does not mean that BBs and Bs were not under pressure; they were. The earnings of the CCC companies have improved, and within the last 12 months these companies have gained access to the capital markets and bank lending.

MR. MONAGHAN handed out a page of two graphs showing the average dollar price of the ARMB high yield portfolio and the average dollar price of the bond in the benchmark from June 2007 to March 2010. He pointed out that Rogge was more conservatively positioned intentionally from the summer of 2007 onward through 2008 and 2009. They outperformed the index by about 560 basis points in 2008. Distressed securities started to rally in 2009, and the index return of 58% beat the ARMB portfolio's return of 36.5% for the year. He said Rogge was not happy with this, and the Board should not be happy with it either. Rogge intentionally took a lower-risk position. They have always said that they are not distressed investors, and they expect to underperform in market environments where distressed securities are rallying. However, they still should have done a bit better than they did in 2009.

MR. MONAGHAN stated that a recovery usually is expected to happen over a two- to three-year period, as it did coming out of the 1991 recession and the 2001-2002 recession. The bond market does not turn on a dime and go back to where it was. But Rogge has seen a full recovery in the high yield marketplace from a dollar-price perspective in about nine months. There have been some fundamental improvements in the demand for steel, paper, and automobiles. But it is not the fundamentals that explain what happened in the marketplace in 2009, just as it is not the fundamentals that explain what happened in lower-priced equities in 2009. What happened was largely

technical. A huge influx of new money came into the high yield marketplace on the retail side (somewhere between \$35-\$40 billion), as it did into investment-grade bonds as well. The average retail investor saw the return on their equity portfolio go sideways over the last 10 years, and they wanted something in their portfolio where they could at least earn something. The average high yield fund grew last year by about 35%, which is an enormous amount. At the same time those mutual funds were growing, the new issue supply was only up about 10%, yet the demand, from the perspective of looking at the index, was up about 45%. So there was a lot of money chasing very few new bonds, which resulted in a fairly significant rise in the average dollar price of the average bond.

MR. MONAGHAN described the characteristics of the ARMB high yield portfolio. The average quality of the portfolio is B, and the average quality of the index is B+. Rogge has increased the risk level of the portfolio in the last two to three months because of a few things they have seen in some industries. They are significantly overweight in basic industry (steel, metals and mining, in particular), in energy (less volatility), and media (cable television, because even unemployed people keep their TV service). Rogge is significantly underweight in the financial sector (banks, financial services, and insurance) because they do not want to be exposed to arbitrary and political decisions regarding the survival and health of these companies. For the first time since the middle of 2007, they are actually overweight CCC bonds at the end of the March quarter. The overweight relates to a couple of positions, Ryerson and Metals USA, both leveraged buyouts.

DR. MITCHELL asked how valid ratings were these days, given that a layman can read in the newspapers that the rating agencies are not worth beans and that ratings come down after the event that makes them come down.

MR. MONAGHAN replied that ratings have more validity in the corporate bond sector than they do in most sectors; the place that ratings had the least validity was in structured products. He explained how Rogge's analysts use ratings to look at an array of companies in an industry to see what is at the top of the heap and what is at the bottom of the heap, and then they can figure out the gradations in between. The ratings are not too bad for most industrial companies. The place to get concerned is when looking at financial companies or where there can be arbitrary or political decisions made that can change the outlook of a company overnight. There are tier-one pieces of the bonds of Citibank, Royal Bank of Scotland, Lloyds, and a number of other commercial banks that are in the high yield index because they have a BB rating on that tier-one paper. He could make an argument that that ought to be investment grade; he could also make a very cogent argument that it ought to be CCC because of the arbitrary nature of the payment of interest and principal. So the ratings have much less validity in some industries like that. That is why Rogge uses the average dollar price: in an environment where 10-year Treasuries are 3.75%, he would expect that BBs would be somewhere between 7.5% and 8.5%, a B security ought to be somewhere between

8.5% and 10.5%, and a CCC ought to be somewhere between 10.5% and 12.5%. But in an environment like 2008 and 2009, when ratings were changing rapidly, ratings became much less of an indicator of credit quality. Rogge had to look at some other way to look at risk as one number, and dollar price or yield is one way to do that.

MR. MONAGHAN remarked that the marketplace has been more volatile than he has ever seen before 2008 and 2009. Spreads have further room to tighten. The average spread of the average high yield bond in the spring of 2007 was trading inside of 250 basis points over Treasuries. Right now, the average BB is trading north of 400 basis points over Treasuries, so BBs can get tighter. CCCs may still have a default problem, which is why Rogge would say that in aggregate they represent less value. BBs represent better value, as they have over a long period of time. Rogge believes they can get better incremental return over the next two to three years from positive event risk. They know that investment grade companies will be buying more high yield companies. When that occurs, because of the covenants and because of the call structures that prevent companies from redeeming bonds without paying a premium, Rogge will get taken out at premium prices. They also know that all the LBO sponsors out there want to return money to the investors, and the only way they can do that is to either sell the company or to IPO the company. Because IPOs reduce the debt in a company and improve the capital structure, Rogge will get price appreciation from that. So event risk is good. In aggregate, the environment is shifting from an investor in 2009 being able to buy the most distressed securities and disregard the fundamentals to a bond picker's world where an investor has to pay attention to the fundamentals. Fundamentals over a long period of time bear out, and 2010 and the next several years ought to be good years for bond pickers.

DR. JENNINGS mentioned that Mr. Monaghan was on a panel the last time he was at a board meeting, and the generic question asked of all panel members had been to name asset classes that they liked over one year and over five years, outside their areas of expertise.

MR. MONAGHAN said the answer he had given then was Treasury bonds, while the predominant answer from other panelists was distressed securities. Distressed securities had a spectacular 2009 but a dreadful 2008. In aggregate, they may have done very well, but an investor suffered a lot of pain before getting any profit. He had said Treasuries then because he thought that inflation expectations were too high and an investor could benefit from there. Anyone owning Treasuries for all of 2008 would have been a happy camper. Going forward, he thought high yield would be one of the top four or five asset classes. It has been a rare decade when equities have done better than 10% return. Loans, as an alternative asset class in credit, are likely to underperform because they have already risen a lot, and he thought rates were likely to stay low on the short end for a considerable period of time. High yield can still do fairly well. The 10-year Treasury is at 3.75% right now, and he did not think rates would go up

a whole lot between now and the end of the year. But he recognized the risk longer term from the extensive issuance of Treasuries that will eventually have an impact on Treasury rates. If Treasuries rise to 4.75%, and if high yield spreads are 400 basis points north of that, that would produce something close to an 8.75% running yield. That gets close to a 10% rate of return for equities, which is why he found high yield still quite attractive.

MR. O'LEARY made the observation that Mr. Monaghan was using the yield in his illustration but was not accounting for defaults and losses. He asked what the comparable assumptions would be. MR. MONAGHAN clarified that he was using BBs for an expected high yield spread of 400 basis points over a 4.75% Treasury yield, and BBs have a very low default history in aggregate. The defaults end up blossoming when looking at CCC securities.

MR. O'LEARY mentioned that defaults in aggregate for high yield last year were in the 10% range toward the end of the year. The recovery rates seemed to be worse than the 50% rule of thumb used for previous periods.

MR. MONAGHAN agreed that there were very low recoveries last year, as happened coming out of the previous recession. This year, he expected default rates to be in the 4%-5% band, probably closer to 4%, and recovery rates likely to move north towards the historic norms of 40% to 50%. He added that the long-term mortality rate for CCC bonds, which is the likelihood that they will default over a 10-year period, is in excess of 50%. That means that an investor cannot theoretically get enough extra income to compensate them for the risk of owning CCCs in aggregate over the entire cycle.

MS. SCHUBERT thanked Mr. Monaghan for his presentation.

RECESS FOR THE DAY

CHAIR SCHUBERT recessed the meeting for the day at 4:32 p.m.

Friday, April 23

CALL BACK TO ORDER

The meeting convened for the second day at 9:05 a.m. Trustees Schubert, Trivette, Kreitzer, Erchinger, Richards, Pihl, and Williams were present.

REPORTS (Continued)

15. Investment Actions

15(a). Resolution 2010-08 Delegation of Procurement-Related Authority

MR. BADER stated that the proposed resolution was clarification, as opposed to a change in policy or a change in what the Board should expect in how staff conducts its business in the future. The Board's procurement regulations are set out in 15 AAC 112.110-375. 15 AAC 112-230 authorizes the Board, in its discretion, to delegate in writing its authority under the procurement regulations to a public official. The past practice of the Board and the preceding Board has been to direct staff through the use of an action memorandum. During the recent procurement appeal, one of the issues raised was whether the delegation to staff complied with 15 AAC 112-230. Although the hearing officer did not rule on this point, in consultation with Assistant Attorney General Mike Barnhill and Board legal counsel Rob Johnson, staff drafted the attached resolution delegating procurement authority to ensure the Board is in compliance with the intent of the regulation authorizing such delegation.

MR. BADER made a correction to the last paragraph of Resolution 2010-08, to delete the word "by" so it read, "NOW THEREFORE BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD will delegate..."

MR. BADER further explained how staff would conduct its business. The delegation of procurement-related authority attached to the resolution is very broad in its description of what staff would be authorized to do. It would provide delegation to Deputy Commissioner Jerry Burnett, Chief Investment Officer Gary M. Bader, State Comptroller Pamela Leary, and ARMB Liaison Officer Judy Hall. The delegation also speaks of the possibility of delegating to additional staff. Some supplies and services are purchased for conducting the day-to-day business of the Board — materials for board packets, copier costs, etc. — that are more of an administrative nature and not policy making things. That delegation of authority has gone on since the beginning of the predecessor board, the Alaska State Pension Investment Board.

MR. BADER stated that in the past the Board has always exercised its specific authority on the appointment of investment managers, and there is a specific delegation to the chief investment officer for that. Resolution 2010-08 would not amend that delegation. There are also certain authorities given to the chief investment officer in investment policies, and Resolution 2010-08 would not amend those investment policies or investment guidelines.

MR. BADER made it clear that staff does not believe the procurement delegation resolution would authorize staff to procure the services of investment consultants, actuaries, performance reviewers, investment policy reviewers, or other special professional services outside of what is currently being done by staff today. The delegation is not intended to expand the authority of staff in any fashion; it is to clarify, for the record, exactly what the expectations are of the Board and staff and how it should conduct its business. He asked for approval of Resolution 2010-08 and the attached delegation of procurement-related authority.

MR. TRIVETTE questioned if a resolution would normally include the actual names of people holding the position titles to which the Board would be delegating authority. MR. BADER replied that in the case of delegation to the chief investment officer, it is by name, and when he further delegates, he does it by name not by position title.

MR. TRIVETTE asked if the delegation of procurement-related authority included the right of appeal to superior court. MR. BADER responded that the Resolution 2010-08 would not change the rights of appeal under law, which call first for a protest and then an administrative appeal before going to court.

MR. JOHNSON stated that the right to superior court is already in statute and would not change as a result of this action. He added that the other delegation, in addition to the individuals identified in Resolution 2010-08, identifies who the appeal goes to, if there is an appeal in a procurement matter. That is a delegation because the ARMB regulations allow the Board to build its own model. So to the extent that an argument could be made that it was unclear what the process was for appealing in a procurement matter, the proposed delegation of procurement-related authority covers that issue.

COMMISSIONER KREITZER said she discussed this with Mr. Bader, and intended to recuse herself from action on the resolution because of the background material included with it. She also would be recusing herself from taking part in the next item: (b) contract award.

MS. ERCHINGER referred to the second paragraph of the resolution that stated that the Board may contract certain services, including investment custodial or depository powers, and appoint members of the Investment Advisory Council. She asked, if it passed the resolution, if the Board would still have that authority. She thought the paragraph implied that even those powers were being delegated. She asked what professional services the Board was currently involved in and at what level. For example, trustees periodically serve on a RFP review committee, and would that still occur. Her last comment was that perhaps

the delegation was a little too broad, because although Mr. Bader's explanation suggested that the selection of investment managers, actuaries and performance reviewers, etc. would not be affected, it was not clear to her that the delegation was saying that. If that was the aim, she suggested finding a way to make that clearer in writing.

MR. JOHNSON said the context of the Board's role might clarify what this was about. The second whereas of Resolution 2010-08 talks about three tasks the Board does: contract services, delegate certain authority relating to investment custodial or depository powers (not through an RFP process), and appoint members of the Investment Advisory Council. The attached delegation relates to those areas where the ARMB has to engage in procurement. The attached delegation does not apply to the area of the delegation of investment custodial or depository powers because it is not procurement. The same with the appointment of IAC members.

MR. JOHNSON said that the types of things where a procurement process would be used would be for professional services that are not of a type relating to investment custodial or depository powers. That would include the fiduciary audit, which was the subject of an appeal. It would include the general consultant's functions. It would include the actuaries that are retained. In that context, the delegation reaches only the areas where the Board is procuring. However, if the language was unclear, it should be framed better to serve the Board's purposes.

MS. ERCHINGER responded that she was fine with that explanation.

Regarding Mr. Trivette's point, MR. PIHL said he thought the names of individuals should not be in the resolution. But the language could be clear in the deputy commissioner in the Department of Revenue, chief investment officer, etc. Then the Board would not have to amend the resolution every time there was a change in personnel.

MR. WILLIAMS pointed out that in the delegation of procurement-related authority the Board was not delegating its responsibility to evaluate RFPs, or the responsibility to approve and issue an intent to award. That is where the Board maintains oversight in the process: it is not giving away the full range for staff to issue an RFP, evaluate it, and then determine who gets the bid. The Board is retaining the right to evaluate and RFP and issue an intent to award.

MR. BADER said that to the extent that Resolution 2010-08 is unclear, he wanted to provide more clarity. In terms of the business before the Board today, there are two items following this resolution that depend upon staff having the authority to act on the Board's behalf. If Resolution 2010-08 is approved, staff

would come back at the next meeting with a resolution that would specifically enumerate the things that he mentioned earlier and correct any uncertainty about what is being delegated.

CHAIR SCHUBERT inquired if the delegation would include the authority to hire someone to replace Mr. O'Leary as general consultant, for example. MR. JOHNSON said no, that the delegation would be for staff to go forward and initiate the RFP process, and it also provides for what the appeal process would be, in the event that there was an appeal. The actual selection of an RFP of that order of magnitude would not be contemplated. There would not be an independent separate ability to simply to say that Mr. O'Leary would get a contract versus somebody else.

MR. WILLIAMS moved that the Alaska Retirement Management Board adopt Resolution 2010-08. MR. TRIVETTE seconded.

MR. TRIVETTE requested, since Mr. Bader had indicated that staff would bring another resolution to the Board at the next meeting, that Mr. Johnson review whether it was best to leave individual names in the resolution. He also asked that Mr. Pihl's suggestion to include "deputy commissioner of Department of Revenue" (to specify the department) be considered.

MR. JOHNSON stated that the choice of whether to add the names or not was up to the Board, depending on how comfortable trustees were with the specificity of the language. He agreed that if personnel changed, the resolution would have to be revised. On the other hand, the names in those positions do not change frequently.

Roll call vote

Ayes: Williams, Richards, Erchinger, Pihl, Trivette, Schubert

Nays: None

Abstain: Kreitzer

The motion passed, 6-0, with one abstention.

15(b). Contract Award - Independent Fiduciary Services for Performance Consultant and Investment Policy Review

MR. BADER reviewed the staff report in the meeting packet *[on file at the ARMB office]* and asked the Board for authorization to enter into contract negotiations with Independent Fiduciary Services, based on the scope of services and cost proposals set out in its proposal. He noted that the price in IFS's proposal was good for 90 days, which has long passed. Staff contacted IFS and, if the contract is awarded, they still intend to honor their proposal.

MR. BADER reported that during the protest and appeal the unsuccessful proposer, John P. Johns, raised the issue that IFS had noted in its request for proposal that after threat of a class action lawsuit it had settled a claim for a modest amount. The protester noted that the modest amount was \$900,000. After the hearing concluded, staff asked Assistant Attorney General Mike Barnhill to talk with IFS and get clarification about the use of the word "modest" in referring to the settlement. After discussion and correspondence with IFS, Mr. Barnhill, the Board's legal counsel Rob Johnson, Ms. Hall, and Mr. Bader discussed the issue and concluded that given the size and scope of the class action litigation that IFS was involved in, and the potential for extended legal fees and the amount at risk, the word "modest" was not out of line.

MR. TRIVETTE moved that the ARMB authorize staff to enter into contract negotiations with Independent Fiduciary Services based on the scope of services and cost proposals set out in its proposal. MR. WILLIAMS seconded.

MR. TRIVETTE said he assumed that Assistant Attorney General Barnhill did not see any issues with the Board going ahead with a contract with IFS. MR. BADER indicated that was correct.

The motion carried 6-0, on an outcry vote. Commissioner Kreitzer abstained. *[Ms. Harbo and Commissioner Galvin were absent for the vote.]*

15(c). GRS Contract Renewal

MR. BADER explained that Gabriel Roeder Smith & Company (GRS) is the actuary firm hired by the Department of Revenue to review any actuarial data that is provided to the Board, per a requirement in SB 141. The GRS contract has renewals in it, and staff was requesting Board direction to initiate the renewal of the contract.

MR. PIHL moved that the ARMB authorize staff to initiate the renewal of the contract with Gabriel Roeder Smith & Company. MR. TRIVETTE seconded.

MR. TRIVETTE commented that GRS has been the second actuary since the ARMB became a new board, and a couple of primary actuaries at the firm have interacted with the Board. He felt both primary actuaries have done a professional job, and he felt very comfortable with their reports. He supported continuing the contract with GRS.

MS. ERCHINGER said she, too, thought that GRS had done a fantastic job. She asked staff if the proposed action was exercising an extension that exists in the current contract. MR. BADER said it did.

The motion passed unanimously, 7-0. *[Ms. Harbo and Commissioner Galvin were absent for the vote.]*

16. MacKay Shields - High Yield Fixed Income

Portfolio Manager GREGORY SPENCER and High Yield Product Specialist JENNIFER BEATTY had been invited to report on the high yield portfolio that MacKay Shields manages for the Alaska retirement fund. *[A copy of the MacKay Shields slide presentation is on file at the ARMB office.]*

Starting with a firm overview, MS. BEATTY said MacKay Shields had a positive 2009, with a lot of growth in all their investment strategies. They also streamlined their investment products, exiting the domestic equity business mid-year and adding some fixed income assets. They began sub-advising fixed income assets for McMorgan, and they also added a municipal team to the firm. They are at record assets of \$45.7 billion. The chairman and CEO opted to resign, and the COO, Lucille Protas, stepped in as the acting CEO while the firm looks for a replacement. The top position has no impact on any of the investment areas, and they are quite comfortable with Ms. Protas at the helm.

MacKay Shields has close to \$20 billion in assets under management in the high yield product the ARMB is invested in. They closed the product last year, after bringing in about \$0.5 billion in new assets and significant flows from current clients. So far this year, they have brought in about \$200 million in assets in the other investment strategies.

MR. TRIVETTE asked if there had been any portfolio management changes in the fund in which the Alaska retirement fund is invested. MS. BEATTY said there have been no changes in the investment team; the last hire to the team was in May 2008. There have been no layoffs, and none are projected.

MR. SPENCER reviewed a breakdown of the ARMB portfolio at March 31, 2010. It was 95% invested in fixed income, and cash was about 4.6%. Two years ago when MacKay Shields visited with the Board, cash was about 8%-9%, and there was a discussion about that. They have made an effort to keep cash invested, in light of the low returns that cash is generating in the current environment.

MR. SPENCER stated that after outperforming the benchmark in 2007 and 2008, they underperformed by a significant amount for the trailing 12-month period (41.21% versus the custom index return of 56.95%). The underperformance was not due to any change in the investment process in order to chase returns, nor was it due to deterioration in the credits that MacKay Shields had selected. They continue to pick solid credits, and the default rate in the portfolio remains at 50% of what the high yield market is in general. In 2009, CCs and defaulted credits actually returned 125%, and CCCs returned 94%. They are seeing the same thing in the first three months of 2010, where CCs and

defaulted credits have returned 15% and CCCs have returned almost 6.6%.

MacKay Shields believes it has just been an overly aggressive gathering of assets that are not necessarily income-producing but are more of a total-return type of play. This has been created by the flood of capital that has come into the asset class from institutional money and core-plus money. Allocations into the high yield market are at near peak levels. This has effectively driven up security prices. It is MacKay Shields' view since late 2008 that they are not being compensated for the risk in the lower-rated credits. They have continued to gravitate toward the better-rated credits, and will until they see a market correction that recognizes a 9.7% unemployment rate, and that recognizes that the environment is not that strong for companies. New issuance is at record levels, and covenants are not set in stone anymore, so MacKay Shields has dialed back a bit on risk.

MR. SPENCER showed a chart of the portfolio composition by quality exposure compared to the BofA Index. They continue to be in a protective mode within the high yield market. The heaviest industry weightings are in energy exploration and production, health facilities, and media (cable). MacKay Shields is very comfortable with these industry sectors because they have extremely stable underlying cash flows. They believe they are being compensated in the current environment for the risk that they have incurred.

Speaking to Mr. O'Leary, CHAIR SCHUBERT remarked that MacKay Shields was the second high yield manager the Board had heard from at this meeting, and both have underperformed the target index. Both managers have stated that it is because they do not feel that they would be adequately compensated for the risk, but the ARMB hired them to take these kinds of risk for the retirement fund. She said she was trying to figure out if the Board should create a different mandate or if a different target should be used. She asked if this was an extraordinary time that justified the underperformance.

MR. O'LEARY said the fact that both high yield managers underperformed the agreed-upon benchmark by a significant amount in a single year, particularly a year like last year, was not surprising or a source of concern. When Lord Abbett and MacKay Shields were first hired, the benchmark was a broad high yield index, but because of the character of that index, where a large issuer of bonds could dominate the index, everyone agreed that the target should be modified to the constrained index. The first index could have encouraged managers who were trying to outperform to have a disproportionate weight in a limited number of securities. A key evaluation factor in hiring both firms was that they were slightly higher quality below-investment-grade bond managers. In an environment where very poorly rated securities — in effect, just high risk equities — performed spectacularly, it is not unreasonable to expect significant underperformance. The managers should be held accountable for outperforming the index over a full cycle; if they do not do that, then they have not met the mission they

were assigned. The periods to look at are immediately before the market meltdown, when the managers seemed to be doing the job, during the meltdown, and then post-meltdown. In the meltdown, the managers were doing the job and significantly outperformed the benchmark. They have underperformed in the initial recovery phase.

MR. O'LEARY said he thought the next 12 to 18 months would be a critical period for the high yield strategy, to the extent that the comments heard yesterday and this morning are accurate (that a lot of hot money is chasing some low quality bonds). The Board should begin to see that separation — the actual performance of the companies that are issuing the bonds will determine whether the people buying the super junk or the people buying the higher quality end of the below-investment-grade spectrum are correct. He thanked the Chair for asking the right question.

MR. SPENCER expounded further on Mr. O'Leary's point. He said the constituents of the index were changed fairly dramatically in 2009, such that some companies, like AIG, were included, along with Sun Trust Bank of Florida, Ambac, and MBIA. MacKay Shields has a very specific investment process whereby they invest in what they know, they invest in asset protection, and they invest in cash flows. They do not know how to assess AIG, from a risk perspective, but AIG is an example of a significant outperformer in 2009. With the government owning 60% of Citibank, it does not meet MacKay Shields' investment process. That hurts them from a performance standpoint. It would be more troubling if they changed their investment process to include firms like AIG and all of a sudden outperformed the index. That is not what they offered the ARMB in the past, and it is not part of their investment mandate. The portfolio suffered in 2009, but over a cycle that will come back and correct itself.

Returning to the presentation material, MR. SPENCER reviewed the portfolio characteristics at March 31. He noted that the yield to worst has been hurt a bit by the 4.6% in cash that is earning about 25 basis points. The average quality is BB- for the portfolio as a whole compared to the index's average quality of B+: that reflects that they do not feel they are being adequately compensated for the risk currently being offered in the high yield market.

MR. SPENCER next described the outperforming and underperforming issuers in the portfolio.

MR. PIHL observed that MacKay Shields featured the Standard and Poors and Moody's ratings in the listings of securities held. He said the paper today had an article about S&P and Moody's manipulating the ratings for fees. He asked if that was a widespread problem in the industry and if it had affected MacKay Shields.

MR. SPENCER replied that MacKay Shields places very little emphasis on the ratings because they often find that they are more of a lagging indicator than a leading

indicator. The ratings for each of the investments play a role when they are comparing them relative to the index. Many investors like to see if MacKay Shields is taking on significant risk relative to an index. They group each of their credits into four groups, Group I being the safest with extremely strong underlying asset protection and stable cash flows, and Group IV being restructurings and those that offer equity like returns. Relative to historical norms for them, MacKay Shields is significantly overweight the stronger credits and significantly underweight the weaker credits.

MR. SPENCER reviewed the current strategy. Given the inflows into the high yield market, and given that companies just out of bankruptcy a year ago are paying themselves dividends, MacKay Shields will continue to gravitate toward safety and where they are being compensated for the underlying risk.

MR. TRIVETTE asked how often MacKay Shields looks at the fundamentals of the companies in the portfolio as part of reducing the risk. MR. SPENCER replied that they spend a great deal of time in meeting with management teams. For example, last evening he had dinner with the management team of GCI, a cable and wireless company in Alaska. They talk to over 100 companies every quarter. They are one of the largest investors in high yield and have immediate access to management teams. Staying on top of fundamentals is both looking at the macro events within the high yield market and staying close to the companies that they invest in.

CHAIR SCHUBERT thanked the presenters from MacKay Shields, and called a scheduled break from 9:55 a.m. to 10:06 a.m.

17. T. Rowe Price - Multiple Mandates

NED NOTZON, CHARLES SHRIVER, CHRISTOPHER DYER, TONY LUNA, and ROBERT BIRCH of T. Rowe Price made a multiple-part presentation on the various funds they manage for the retirement fund in the defined contribution area, where the assets under their management total about \$2 billion. *[A copy of the slides used in the presentation is on file at the ARMB office.]*

MR. BIRCH introduced the other T. Rowe Price people beside him at the table. He mentioned that T. Rowe Price has an 18-year relationship with the Alaska retirement funds, and they appreciate the Board's confidence in them and the willingness to work with them in enhancing the options they manage for the State. He said their presentation would focus on three areas: a summary of the recent enhancements to the allocation glide path utilized in the target date offerings; the addition of several new options put in place over the past year; and a review of the current options, including the stand-alone stable value portfolios and the stand-alone small cap stock trust.

MR. BIRCH gave a brief update on the firm, saying it remains stable and financially healthy. Being conservatively managed and having no debt proved to be a huge

advantage for the senior management team over the past year because they did not have to focus on the viability of the organization but rather were able to focus on continued investment in the research platform that supports all the strategies. The firm continues to be managed by a seven-person management committee, which has seen one change. Mike Gitlin became the director of the Fixed Income Division, succeeding Mary Miller, who was appointed by the Obama Administration to Assistant Secretary for Financial Markets. There have been no changes to the team of individuals responsible for working with the State of Alaska portfolios.

MR. BIRCH mentioned that since the original Balanced Trust was introduced in 1992 T. Rowe Price has worked collaboratively with the staff and the board to continuously improve the existing options, and where appropriate, introduce new options, such as the Long-Term Balanced Trust in 2001, a series of Target Retirement portfolios, stand-alone money market offerings, two stable-value portfolios, and the Small Cap Stock Trust. There has been a lot of activity in the last two years to improve the overall suite of offerings for participants. The underlying building block portfolios used in the target date retirement options and the balanced trusts were consolidated and simplified. A new asset allocation glide path was adopted, which is near the end of its implementation phase. The Board adopted the Target Retirement Trusts as the default options for the SBS and PERS and TRS plans. Six new Target Retirement offerings were created during the past year. Finally, the risk parameters used in the underlying building block portfolios that support each of the above options were tightened.

MR. SHRIVER reviewed in detail the enhancements to the investment options over the last two years, to make a state-of-the-art retirement plan for the State of Alaska. Primary among the changes was the extension of the glide path for the Target Retirement Trusts into retirement; previously the glide path went up to retirement and transitioned into 100% cash. Now, a participant can go from enrollment up to retirement and all the way through retirement, and the risk profile of the Target Retirement Trust automatically adjusts as the investor's time horizon shifts. T. Rowe Price now offers a suite of ten Target Retirement Trusts ranging from 2010 to 2055, in five-year increments. Another change was a higher neutral weight to international equities in the trusts to reflect the greater representation of international equities in terms of global market capitalization and to reflect their contribution to global corporate profits and GDP growth. The underlying building block funds were consolidated from six to four, with the introduction of a U.S. Equity Trust and an Aggregate Bond Trust to go with the Money Market Trust and the International Trust. Lastly, T. Rowe Price introduced benchmark-relative limits within the International Trust in terms of sectors, securities and countries.

MR. SHRIVER spent some time describing in more detail the revised glide path of the Target Retirement Trusts that goes to retirement and through the years of retirement. He noted that the equity allocation balances the need for long-term capital appreciation, in order to limit the negative impact from factors such as inflation over a 30-year

retirement horizon, and the need to balance short-term market risk by incrementally getting more conservative as the portfolios approach retirement and go through retirement.

MR. BADER commented that almost every large mutual fund has a glide path that is somewhat similar to the shape of the T. Rowe Price glide path. He asked for an explanation of how T. Rowe Price determines what glide path it recommends.

MR. SHRIVER explained that T. Rowe Price has done extensive analysis historically as well as using Monte Carlo projections to model the behavior of target retirement portfolios over the accumulation period while a person is working and the distribution period when a person is retired. They sought an asset allocation that targeted a 90% success rate, in terms of having assets at the end of a 30-year investment horizon. Importantly, the amount of equities is a significant determinant in finding an allocation that has the most success across the investment outcomes.

DR. JENNINGS asked if T. Rowe Price had experience in customizing the glide paths for the specific circumstances of the participants. He asked further if they were looking at just this portfolio when doing the simulation, or if they factored in that some of the target date participants were participating in a defined benefit plan while other participants were not.

MR. SHRIVER replied that not everybody will have the same exact circumstance, but they try to account for those broadly. For example, for those participants who have [the Target Retirement Trust] as a Social Security replacement plan, that would be parallel to those who might have Social Security outside of the plan. Those are fairly similar structures, and in tests, the T. Rowe Price asset allocation is successful across a broad scope of participants.

DR. MITCHELL asked if T. Rowe Price allowed for extraordinary market occurrences, such as 2008, where if they followed a predetermined glide path they would be selling stocks at what might prove to be the bottom and buying bonds at what might prove to be the top.

MR. NOTZON stated that in 2008 the much bigger phenomenon was rebalancing. At the time, T. Rowe Price had about \$70 billion in asset allocation portfolios, and during 2008 they actually sold \$4.9 billion in fixed income instruments to buy stocks. By the end of 2008, they had a very low cost basis on the stocks, and they really got the benefit when stocks came back starting March 9, 2009. They were not only fully invested, but they had gone to a 5% overweight in stocks. That showed up as a 2.5% overweight in the Alaska portfolios. Their concern was to own enough stocks and not to try to flee the market. The people who did flee the market generally did not get back in in time, so they suffered irrevocable losses. T. Rowe Price went to an overweighting in

stocks because cumulative returns are not symmetric. They debated whether there would be a recovery, but with the massive amount of money being thrown at the problem, and an incredibly willing desire to attack the problem by both the Bush and the Obama administrations, they thought there would be a recovery — the real question was when it would come. March 9, 2009 changed a lot of things in the financial markets.

MR. RICHARDS said he was surprised that money markets do not show up until 20 years into the glide path, and he also wondered why there were bonds 40 years out into the retirement years. MR. NOTZON stated that for those kinds of time intervals it is very likely that both stocks and bonds will outperform money markets. Money markets have a stability of principal, but T. Rowe Price is actually quite late in introducing cash. Getting close to retirement and then into the retirement years, managing volatility becomes very important, and that is why the cash pops up. It is not really there as safety, because participants cannot go into their portfolio and pull out the cash, but it dampens the volatility so they are less likely to have a down-side excursion that takes them below the threshold where they cannot recover.

As a follow-up on the assumptions in determining the glide path, MR. BADER posed the question of how much a person with \$100 in their account on their retirement date should withdraw in the first year. MR. NOTZON said \$4.

MR. O'LEARY asked how the Alaska Target Retirement Trust glide path compared to T. Rowe Price's target date mutual fund glide path. He also asked how they saw that changing through the industry.

MR. NOTZON responded that the glide path provided for the State of Alaska is exactly the same glide path that T. Rowe Price sells to its retail audience and 401K plans. Generally, T. Rowe Price has more exposure to equities than the target date mutual funds of their competitors. Because people's longevity has been increasing, and if it continues to increase, they need to have enough equity exposure to compensate for inflation for many years.

MR. SHRIVER presented a slide showing the amount of assets in each of the 17 funds, noting that at March 31 the Balanced Trust crossed its 18th year anniversary with \$1 billion in assets. Overall plan assets managed by T. Rowe Price totaled \$2 billion.

MR. NOTZON next talked about the performance of the Balanced Trust, the Long-Term Balanced Trust, and the Alaska Target Retirement Trusts. He mentioned that a committee of senior managers meets once a month to review what is happening in financial markets and to see if there are any distressed sectors where the reasons for them being beaten up have gone away and there is no logical reason why they should not recover. It frequently takes a year and a half to two years for the market to find some catalyst that causes it to move back into a sector. At this time, Rowe Price has

about a 1.5% overweight in stocks versus bonds (reduced from 2.5% overweight) because they see modest growth in the economy and interest rates are likely to go up; so bonds, rather than being a haven of stability in perilous circumstances, could be going down in value. Last year they overweighted foreign stocks relative to domestic stocks, and that helped performance. At the last committee meeting a few days ago, the senior managers concluded that Europe in particular faces tensions over currencies that highlight other issues in the European markets, so they are more comfortable now being neutral between domestic stocks and foreign stocks. That decision will probably be implemented next week.

MR. NOTZON stated that all the funds with more than a one-year track record outperformed their benchmarks, net of all management, custody and accounting fees. He reviewed what contributed to and detracted from returns over the 12-month period ended February 28, 2010. Four of the seven funds with less than a year's performance outperformed the benchmarks in a range from one basis point to 60 basis points, and the two underperformers were by two and five basis points.

CHAIR SCHUBERT said she liked the returns reported net of fees because it is a true reflection of how well T. Rowe Price has done.

Responding to MR. TRIVETTE's question about the difference in performance between the two Balanced Trusts and the Target Retirement Trusts, MR. SHRIVER explained that in the portfolios with a glide path they hold the stock/bond mix on the glide path. But right at the market inflection point there was a modest underweighting to equities, and that sharp bounce off the bottom is represented in the allocation effect. The Balanced Trust and the Long-Term Balanced Trust got a benefit because they were distinctly overweighted in equities.

MR. NOTZON stated that when the Target Retirement Trusts were started they only had \$10-\$20 million, and they were vulnerable to not being exactly at their sector weights. Cash flows were a much more significant part of the overall market value and, as a result, it caused some distortions — either positive or negative. Now a number of the new portfolios have more than \$100 million in assets, so revisiting that policy is probably in order. Perhaps it should be done one way for a fund with \$20 million in assets; and a portfolio with more than \$100 million in assets could be taking advantage of the overweights and underweights.

MR. O'LEARY said that it takes time for money contributed to a program to get to its ultimate destination. He asked how that was accounted for in the performance of the Target Retirement Trusts, or if it was not.

MR. NOTZON stated that the money goes to the money market fund first, and then they choose the points at which they distribute it. The managers know it is coming so it can

be as non-disruptive as possible; the fund managers are not charged with the cash until they actually receive it.

MR. SHRIVER said they do that for the Balanced Trust, which is the largest. In accounting for that in the return attribution, it would show up under cash flow and rebalancing. For the smaller portfolios, the money goes straight into the underlying portfolios, like the U.S. Equity Trust, International Equity Trust, etc.

MR. NOTZON reviewed the fund performance for longer time horizons. The Balanced Trust has outperformed the benchmark for one, three, five and ten years, and since 1996; it underperformed by two basis points since 1992 because the benchmark was not changed when they added international stocks. The Long-Term Balanced Trust outperformed the benchmark for one, three, and five years, and underperformed by four basis points (net of all fees and expenses) since 2001. He also reviewed the Target 2010 Fund, the Target Retirement 2015, 2020, and 2025 Trusts, and the Money Market Trust over longer periods.

MR. NOTZON noted that the performance of portfolios is driven in large part by the four underlying trusts, or building block portfolios, in which the stock and bond selections are actually made. He reviewed the returns of the four building blocks. The Money Market Trust has outperformed for all time periods. The Aggregate Bond Trust and the U.S. Equity Trust do not have very long time records. The International Trust has underperformed substantially for three years, one year, and three months.

MR. NOTZON said they broke out the monthly activities in the International Trust portfolio from September 2008 until March 2010. At the State of Alaska's request, they, and other managers, got much closer to the benchmarks. ARMB investment staff was actually monitoring the manager deviations from the benchmarks to make certain that they were not buying rogue instruments or taking larger bets than people had anticipated. T. Rowe Price made substantial changes to meet that standard. Then the TRP committee of senior managers decided that 20% of the equities allocated to international stocks would be more appropriate than the prior weights that ranged from 0% to 7%, so they did a lot of purchasing during a nine-month period that generated fees and increased tracking error to the index. For the last seven months, the annualized tracking error has been 38 basis points. They are rebalancing the portfolios daily, so even in quite marked international environments, they compensate almost immediately. They expect a tracking error of 90 to 225 basis points for the Alaska International Trust in the future.

MR. O'LEARY asked if T. Rowe Price envisioned changing the 20% of the equity component that is now targeted for international equities. MR. NOTZON said they think it will be there for a long time; the vast majority of their competitors tend to be right at 20% international in their equity component — except for AllianceBernstein, which has

substantially more international exposure.

MR. TRIVETTE inquired if there were any other major areas of concern with the Alaska International Trust, now that T. Rowe Price had worked through the process. MR. NOTZON said no, it is a normal international equity portfolio at this time. They had done most of this sort of thing in other areas before, but it had a big negative effect on the international portfolio during the time period he described.

MR. LUNA spoke on the stable value portfolios, which are the Interest Income Fund in the State's Deferred Compensation Plan, and the Stable Value Fund in Alaska's Supplemental Annuity Plan. Stable value is typically a substitute for a money market option. The three primary objectives are principal preservation, to provide a premium over a traditional money market fund, and to be more stable than a traditional money market fund. Over the last 18 months, principal preservation was the paramount. The stable value industry was not immune to the market turmoil, and some things continue to ripple through the industry.

MR. LUNA said the Alaska stable value funds are meeting the objective of outperforming a money market product. Their returns are very stable over the one-year through ten-year periods, despite how much volatility there has been in the market and considering how much interest rates have moved over those time frames.

MR. LUNA took a few minutes to explain the graph of a risk metric called the market-to-book ratio. He said the biggest risks in the past were always seen as cash flows and interest rates; in the last cycle it became spread and credit risk, which shocked a lot of people. He said he helps manage some of the underlying portfolios, and the stable value groups and fixed income managers work closely together. They watched the trajectory of the market-to-book ratio sliding under 100% in late 2008 when interest rates were trending down, which is not the right relationship. Meanwhile, the Alaska stable value funds have risen to almost 105% market-to-book. The managers started making some decisions in the various fixed income and money market accounts that maybe some of their competitors did not; that was, they were selling things like regional banks. In stable value, principal preservation became the most important thing, and they made some portfolio changes that did not give up a lot of yield. T. Rowe Price has tried to deliver and mitigate risk when the stable value fund participants need them the most. What will be interesting going forward is that as interest rates rise one would expect the market-to-book ratio to get lower, and T. Rowe Price's competitors, as measured by the Hueler Stable Value Pooled Index Fund, are already working from a low base.

MR. O'LEARY remarked that stable value products are very misunderstood by clients, so he was glad this conversation was happening. He asked what would happen to the wrapper if the issuer of a security in the underlying portfolio were to go bankrupt and there was a real loss.

MR. LUNA explained that in that instance a stable value fund works very similar to a money market fund. The contracts with a wrap provider are not credit protection contracts, so there is the possibility that if the portfolio owns a security that defaults the wrap provider could make the manager mark that contract to market — meaning the stable value fund could break the buck.

MR. O'LEARY said he wanted everybody in the room to understand that there is no guarantee that there will be no loss in stable value. MR. LUNA confirmed that statement. He added that as long as the security is not bankrupt, a gain or loss on a normal sale is amortized over the duration of the portfolio, but a defaulted security can be treated differently. Historically, the wrap provider does not want to mark that contract to market, and they will let the manager amortize it over the portfolio duration; it is predicated on the impact the security has. The T. Rowe Price stable value funds are well diversified, and exposures on underlying securities might be 10 to 15 basis points per name.

MR. O'LEARY said another aspect of stable value that he finds is frequently misunderstood or under-appreciated is if a plan went out and encouraged participants to get out of the stable value fund, that would undermine the wrap provider's obligation.

MR. LUNA stated that when a wrap provider agrees to wrap a plan, in underwriting certain aspects of the plan, it is similar to an insurance company writing term life insurance. If an outside source has encouraged a withdrawal and materially changed the cash flows of that investment option, the wrap provider could question whether they should make payments at book value.

MR. O'LEARY said one such outside force might be the introduction of a directly competing alternative option that might prompt participants to transfer from the stable value investment vehicle to that competing alternative.

MR. LUNA mentioned that in 2008 the State of Alaska plan introduced the U.S. Treasury Money Market product. T. Rowe Price had to get the wrap providers to sign off on the introduction of that competing fund. A competing fund is defined as something that has less than a three-year duration. Eventually money market rates will get higher than zero, and while stable value responds slowly to market changes, at some point there could be disintermediation. The idea is that wrap providers do not want people transferring into the money market option without first having to take on some market risk; this is called an equity wash provision.

MR. O'LEARY stated that from looking at stable value options in other plans he knew that much of the decline in the market-to-book value ratio was because of significant investment in subprime collateralized obligations that nominally had AAA ratings but

which plummeted in value.

MR. LUNA explained that T. Rowe Price has proprietary research and was not relying on the rating agencies when its competitors had AAA ratings and higher yields in their portfolios. He said when T. Rowe Price is not underperforming he can talk about a consistent, disciplined approach at any client meeting, and it has no traction. But now, looking back, even though the T. Rowe Price stable value funds are in the top decile, the most important factor is that they have been consistent. They are not changing their stripes through time and chasing yield; they are doing what is best for their clients and sticking to their process.

MR. LUNA reported that the SBS Stable Value Fund has had a lower yield than the DC Plan Interest Income Fund, and that is because the SBS Stable Value Fund has grown almost three times the size since inception, creating a lot of cash flow volatility. That fund has been reinvesting a significant amount of cash in lower yields.

MR. LUNA briefly reviewed the counterparties, or wrap providers, that are currently in the two Alaska stable value accounts. The account in the SBS had about 10% cash on February 28, 2010, and the account in the DC Plan had about 5% cash. Now, the SBS Plan is down to about 7% cash, illustrating the more volatile cash flows, while the DC Plan remains at 5% cash. MR. LUNA also referenced slides about the characteristics of the underlying bond portfolio, which is a passively managed Barclays Capital Intermediate Aggregate Index portfolio.

Addressing the big issues that remain in the stable value industry, MR. LUNA stated that there is scarce wrap capacity. There are not a lot of new issuers to diversify the portfolio because everyone reined in capital coming out of the financial crisis. But T. Rowe Price is in negotiations with a few wrap providers that they would like to add into the portfolio. The second issue is that wrap providers are becoming more conservative, so they want to renegotiate contracts and investment guidelines; they want to de-risk their portfolios. The Alaska stable value portfolios do not have a lot of risk, which is good. The outlier is that the duration of the underlying bond portfolio is about 3.5 years, and the wrap providers may want it a little bit shorter, like three years. Lastly, there is upward pressure on wrap fees. The average wrap fee a couple of years ago was eight basis points; it is up to 13 basis points now, and to buy a new wrap today it would probably be priced at 20 basis points. That is because there is a lot of demand for counterparty exposure, and there is not a lot of supply, so it is a function of the markets.

MR. BIRCH reviewed the Small Cap Stock Trust, which he said is a broadly diversified portfolio of both small cap growth and value companies, totaling about 300 securities. The intent is to provide down-side protection in down markets and to keep pace with the market generally in up markets. There has been no change in investment process or in any of the investment professionals associated with this small cap strategy. The

portfolio has outperformed the Russell 2000 Index over all the periods since Alaska began offering this investment option to its participants in December 2001. T. Rowe Price's more conservative approach tends to do well in the type of challenging market experienced over the past two years. The portfolio underperformed the year before, which caused the ARMB and staff some concern, and T. Rowe Price is grateful for everyone's patience during that period.

MR. TRIVETTE mentioned that T. Rowe Price was in the forefront of the news three years ago related to their target date funds. He asked if they could forward any recent literature or articles to the Board. MR. NOTZON said they would.

MR. DYER thanked the Board and stressed how significant T. Rowe Price regards the long-standing relationship with Alaska, which is one of their largest institutional clients. They will continue to work with Alaska as the needs of the retirement plans evolve. It is a unique mandate in that the ARMB is drawing on the full resources of T. Rowe Price.

Action Item: 2010 Target Fund Transition

MR. BADER reviewed the one-page staff report in the meeting packet *[on file at the ARMB office]*. He explained that the Alaska Target 2010 Fund offered in the SBS Plan differs from the other target retirement date trusts that have a glide path in that the Target 2010 Fund was designed to become fully invested in cash upon reaching the December 2010 target date. The legacy target date funds were structured to anticipate that a person upon retirement would withdraw all their money or perhaps buy an annuity offered through the Department of Administration. When the Board decided to go to target retirement funds, the question was what to do with the Alaska Target 2010 Fund that was almost all cash already. If the decision had been to put it into the new Alaska Target Retirement 2010 Trust, it would have been acting for the participant and putting them into more equities than they might have expected they were in. It turned out to be fortuitous for the participants that they stayed in the Target 2010 Fund in 2008 instead of going into the Target Retirement 2010 Trust, because they stayed invested mostly in cash.

MR. BADER stated that the Alaska Target 2010 Fund is approaching the date when it will close. The Alaska statutes, if not explicit, certainly infer that conversation between the Board and the Commissioner of Administration should take place prior to establishing any new options in the SBS Plan and Deferred Compensation Plan. Staff has considered three options for mapping the Target 2010 Fund participant accounts into another investment option, if they do not withdraw their money or transfer it to another investment option. He and Deputy Commissioner Burnett met with Commissioner Kreitzer, the deputy commissioner, and DRB Director Shier and presented the action memo.

MR. BADER said that, to be in compliance with statute, staff was asking the Board at

this meeting to direct the staff to begin the dialogue with the Commissioner of Administration. They would work together to bring a suggestion to the Board in the future about what might be done with the Target 2010 Fund accounts after all the notification the Department of Administration does with participants has been completed and some participants have failed to respond. He asked Commissioner Kreitzer to speak about the actions she thought needed to be done on behalf of participants in the Target 2010 Fund.

COMMISSIONER KREITZER said that one of her concerns was making sure that the State communicates with the plan members. The meeting with Revenue staff included a discussion about some of the things that will be brought back to the Board in terms of how notification of the pending closure of the Target 2010 Fund would be rolled out.

COMMISSIONER KREITZER moved that the Alaska Retirement Management Board direct investment staff to consult with the Commissioner of Administration recommending closure of the Alaska Target 2010 Fund to new investment on December 31, 2010 and mapping any remaining participant investments into the Treasury Money Market Fund on June 20, 2011. MR. TRIVETTE seconded.

MS. ERCHINGER inquired if investment staff wanted to leave in the direction regarding mapping remaining participant accounts into the money market fund. MR. BADER said he had discussed this option with the commissioner, and he was comfortable leaving it in the motion pending further discussion that could lead to the commissioner determining that something else should be brought to the Board.

The motion passed unanimously, 7-0. *[Harbo and Galvin were absent for the vote.]*

LUNCH BREAK

CHAIR SCHUBERT recessed the meeting for lunch at 11:40 a.m. Trustees Schubert, Trivette, Erchinger, Kreitzer, Pihl, Richards and Williams were present when the meeting reconvened at 1:00 p.m.

REPORTS (Continued)

18. FY09 Draft Actuarial Valuation Report for PERS/TRS NGNMRS/JRS Roll Forward Analysis

DAVID SLISHINSKY, MICHELLE DELANGE and CHRISTOPHER HULLA of Buck Consultants, the State's actuary, appeared before the Board to present the June 30, 2009 actuarial valuation results for the Public Employees' Retirement System and the Teachers' Retirement System defined benefit plans, and the 2009 roll-forward valuation results for the Judicial Retirement System and the National Guard and Naval Militia Retirement System. They also presented the 30-year projections for PERS and TRS.

The ARMB has the responsibility for the PERS, TRS and National Guard plans, and the Commissioner of Administration and the ARMB share the responsibility for the Judicial Retirement System. *[A copy of the Buck Consultant slides for this presentation is on file at the ARMB office.]*

MR. SLISHINSKY stated that Buck also does an annual valuation on a couple of benefits in the defined contribution plans, but he understood that the auditing actuary had not completed the audits on those two plans, so Buck was postponing presenting those valuation results until June.

MR. SLISHINSKY said there were no changes in the benefit provisions of the plans since last year, and no changes in the actuarial assumptions, except for some elements of the health care benefit costs for PERS and TRS. There is a group of employees who were hired prior to 1986 that Buck makes an assumption for Medicare Part B only for the employees and retirees and any inactives. That assumption decreased from 4% to 3.5%.

MR. TRIVETTE inquired if the assumption for Medicare Part B for the people hired prior to 1986 was based on actual data or if it was estimated. MR. HULLA replied that Buck continues to refine the guesstimation, which is why it decreased to 3.5% in 2009. The estimate is driven by the hospital claims that Buck sees in the data that are not coordinated with Medicare, so it is a lot easier to get a handle on this in the current retiree population. The missing element is former employees who are re-employed after retiring after April 1, 1986 and who contribute to Social Security in some other employment for 10 or even 20 quarters. While the information in the valuations reflects a non-Medicare Part A hire date, claims submitted later as part of the Retiree Medical Plan are coordinated with Medicare. That is a lot of why the assumption has been coming down. The good news going forward is that the database being delivered from Wells Fargo Insurance Services of Alaska administering the plan has a better potential for giving Buck firm information on the current retiree database when these retirees submit hospital claims.

Continuing with the changes since last year, MR. SLISHINSKY said Buck changed the calculation of the amortization of the unfunded liability. They had been using a simple interest approach that was consistent with the prior actuary. Previous audits have noted that a more accurate calculation is based on a compound interest approach, so Buck made that adjustment for the 2009 valuations. Lastly, there was no change to the health care base claim cost rate methodology for PERS and TRS, with the exception of increasing the medical claims lag from 1.78 months to 2.57 months, and the prescription claims lag was decreased from 0.6 months to 0.5 months.

MR. SLISHINSKY first reviewed the member and asset data used for the PERS actuarial valuation, compared to the information used for the previous year's valuation.

He noted that this is a closed plan, and all new hires join the defined contribution plan. As a result, anybody who terminated or retired during the year was not replaced with any new hires, so the active population is decreasing. From 2008 to 2009, the population decreased from 28,850 active employees to 27,565 active employees (about 4.5%). The total population of PERS declined by about 1.0%. He also reported on the annual compensation, the value of assets, annual benefit payments, and accumulated member contributions. From 2008 to 2009 the market value of assets decreased by about 20% due to investment losses.

CHAIR SCHUBERT asked if the \$735 million in benefit payments was for both retired and active PERS members. MR. SLISHINSKY said it was benefit payments to retirees, beneficiaries and disabled members, and included retiree medical claims and refunded contributions.

MR. SLISHINSKY described the development of the actuarial contribution under the entry age actuarial cost method, the results of which were shown separately for pension and for health care. The total unfunded liability for PERS is \$6,336,000,000 under the 2009 valuation. That compares to last year's unfunded liability of \$4,848,000,000. A lot of that is due to the asset experience. The funded ratio of the plan is 61.8%, meaning the accrued liability is greater than the assets. Last year that ratio was 69.5%.

MR. SLISHINSKY stated that the total actuarial contribution for PERS for the year is \$731 million; that represents 36.53% of the total payroll, which is about \$2 billion for fiscal year 2010. Other members are contributing 6.5% of their pay, and peace officers and firefighters are contributing 7.5%. Blended, the percentage of total payroll is 5.77%, or \$116 million. Once that is subtracted out of the total contribution, the remaining employer/state contribution rate for FY12 is \$615 million, or 30.76% of total payroll. That does not include the defined contribution plan. Under SB 125, the state assists by paying if the rate is over 22%; the 22% is determined for all the employers based upon not only the contribution to fund the defined benefit plan but also the contribution to fund the defined contribution plan. Buck will provide that information to the Board in June, once they have the defined contribution plan valuations completed.

CHAIR SCHUBERT asked how the current total contribution rate compared to what it was last year. MR. SLISHINSKY said the contribution rate last year was 27.96%, so it has gone up to 30.76% in the 2009 valuation, or about 2.8%.

CHAIR SCHUBERT asked if the unfunded liability issue would be resolved at the point that the employer/state contribution rate falls below 22% or if there would still be an unfunded liability to deal with.

MR. SLISHINSKY responded that if adding the defined contribution piece to the 30.76% contribution rate makes the rate drop below 22%, then the State assistance stops.

MR. SHIER added that there will still be an unfunded liability to be paid, even after the total contribution rate goes below 22%. The unfunded liability will be paid by all the employers in the system as a premium above the normal cost, provided that the normal cost remains somewhere in the neighborhood of where it is currently (9%-11%).

MR. SLISHINSKY reviewed a summary of the actuarial gains and losses on the total accrued liability, those being the differences between what Buck expected to happen during the year, based upon the various assumptions, and the actual experience in the PERS system in the year.

MR. TRIVETTE remarked that the valuation report did not really provide the full picture of where the money is coming from and where the money is going. MR. SLISHINSKY said this report would show where the money was coming from to fund the defined benefit plan; in June, when the defined contribution plan numbers are known, Buck would update the graph to show the defined contribution piece and talk more about it then.

MR. SHIER related that the auditing actuary, GRS, told the Board yesterday about the persistence of termination experience losses and of medical experience gains in the PERS valuation. He asked if GRS discussed this with Buck Consultants.

MR. SLISHINSKY said he talked to Leslie Thompson about the results, and he informed her that Buck was currently doing an experience analysis that is performed every four years as part of their contract. The analysis will look at what trends have developed over that four-year period, and Buck can determine if there needs to be adjustments made in any of the assumptions. He expected to present that information at the September meeting.

When MR. TRIVETTE commented that the Board would not have the information before it set the rate in June, MR. SLISHINSKY said Buck would provide the experience study information to the Department of Administration, but then the auditing actuary has to review it and provide their input before Buck can present it to the ARMB.

MS. ERCHINGER mentioned that all the pension experience was losses, according to GRS. Another topic discussed with GRS yesterday was the magnitude of the "other" demographic experience. Because it is so large, she would like to know what the "other" is and whether the composition of "other" changes from year to year.

MR. SLISHINSKY said Buck could provide that information to the Board. He added that new entrants and rehires are always going to be a loss. Buck sets the termination rates conservatively to take into consideration that some years there will be losses for new entrants. Part of the issue is that in this four-year period the PERS system would

typically have more terminations than expected if the economy was doing well and jobs were plentiful. Buck is seeing termination losses with most plans because people have fewer options and are staying employed. Salary increases for continuing actives was higher than expected, resulting in an actuarial loss; that is unusual because Buck has seen salary gains for most plans they work on. The PRPA (post-retirement pension adjustment) also had a loss because the Alaska CPI for the year was 4.4% compared to the 3.5% assumption. Again, Buck is seeing gains there in other plans because those plans are tied to the national CPI, which is flat. All the decrements result in \$112 million of actuarial losses, which is 1.16% of the accrued liability. They are reviewing the assumptions now and will be making recommendations for adjustments to these rates.

COMMISSIONER KREITZER clarified that the Anchorage CPI rose 4.4% in 2008, which is what the 2009 valuation uses. The 2009 Alaska CPI number would be in the 2.4% range.

MS. ERCHINGER asked Buck to consider in the future whether the move to the defined contribution plan could potentially have the effect of driving salaries upward because employers have less lucrative benefit packages to attract or retain employees. She wondered if in the future that might create a persistent increase in salaries over what Buck anticipated under general conditions of a retirement plan.

MR. WILLIAMS commented that he understood that the salary experience was only salary increases to people who are eligible for the defined benefit plan and does not recognize that employers may have to offer higher salaries to defined contribution employees to get them to stay.

MR. SLISHINSKY said the two points would have different impacts. If salaries increase for current employees that are participating in the defined benefit plan, there would be an actuarial loss on salary increases. If salary increases are for new entrants, affecting defined contribution plan employees, the impact would be in reducing the contribution rates because the total DCR payroll would go up.

MS. ERCHINGER stated that, in her experience, an employer has a single pay plan. So to the extent that an employer has to offer higher pay for people at the entry level, that will change the pay plan as a whole — which means that people in the middle or end of the defined benefit plan are going to retire out at higher end pay than the actuary might have expected otherwise.

MR. SHIER said that in the first year of the defined contribution plans the Governor, Senate and House put money into operating and capital budgets in order to help the employers. A number of employers chose to take advantage of that help and increase their staff and payrolls. He did not think the Board could look at that mix without also considering the effect of the hundreds of millions of dollars that are now liberating other

local, government and plan participant funds so that they can hire more people or do other things.

Resuming his explanation of actuarial gain/loss on the accrued liability, MR. SLISHINSKY pointed out that the medical experience was a significant gain of \$281 million.

MR. HULLA explained that there are four key components of the favorable experience on medical cost rates this year and several prior years:

- Buck specifically made some conservative adjustments on the June 30, 2006 valuation: they recommended holding off on the glide path of the trend assumption that starts at a higher rate and grades down over time, and, due to some data questions they had about the claims information, they made some conservative assumptions in developing the claim cost rate at that point in time. One example was the percentage of retirees without Medicare Part A.
- The most significant component over the last three or four years has been the very favorable results of provider contract discounts when moving from Aetna to Premera. Buck was able to see some of the results in the claims information in the June 30, 2007 valuation, and more thoroughly in the 2008 valuation. They recommended smoothing out the gain and not taking it all in one year, because provider discounts are somewhat cyclical if other competitors come in and one carrier no longer has the great differential that they used to. The discounts persisted longer than Buck expected they would, so that was another source of gain over time.
- The flip side of the economic down turn is a lower use of health care generally and less pressure from providers to increase their fees.
- The change to Wells Fargo as the new administrator effective July 1, 2009 is not part of the medical experience gains to date, but Buck believes, in analyzing the contract, that in total it will present a better picture than when Premera was administrator. So the plans should see additional gains over time from that change.

MR. SLISHINSKY reviewed the sources of change in the PERS employer/state contribution rate from last year to this year. He also showed a series of graphs showing the employer/state contribution rate history, the actuarial accrued liability history, and the history of the funding percent.

MS. DELANGE reported on the results of the June 30, 2009 Teachers' Retirement System valuation, noting that many of the points Mr. Slishinsky discussed on the PERS system applied to the Teachers' system as well. She started with the data on the participants and the assets, mentioning that the TRS also saw about a 1% decrease in the population. Assets were the big story this year: the market value of assets went

down about \$1.1 billion, and the actuarial value went down about half a billion dollars. The smoothing has helped in setting of the contribution rates, but the corridor of 120% restriction has impacted the plan this year and forced recognition of another half a billion dollars on the actuarial value of assets that would not be recognized if the corridor were not used. There is about \$746 million worth of deferred investment losses not yet recognized in the smoothed value of assets, so some big losses will be recognized as the next four years unfold.

MS. DELANGE presented a summary of the contribution rate for the TRS. In total, the unfunded liability is about \$3.4 billion, which compares to \$2.7 billion last year, the increase being due to the asset losses. The funded ratio is about 57%; that ratio was about 65% last year. The total contribution rate for TRS is 50.11%, and that is offset by the expected defined benefit member contributions (about 7.75% of total payroll), bringing the employer/state contribution rate down to 42.61% for FY12. This compares to 38.56% last year.

MS. DELANGE reviewed the summary of gain and loss on the total accrued liability for TRS, saying it is a very similar story to PERS. It is mostly losses on the pension liability side and a gain on the medical experience side. She noted that, unlike PERS, the retirement experience for TRS has been a gain, and has been a gain for the last four years. In their experience analysis results this far, Buck is seeing higher-than-expected reduced retirements, which is similar to PERS, but they are also seeing lower-than-expected unreduced retirements. So those lower-than-expected unreduced retirements are producing some gains, and the two different things are netting out to be a gain on the Teachers' side. As Mr. Slishinsky explained, a lot of the loss from Other Demographic Experience is due to the rehires coming back into the plan and accruing more benefits, where Buck had expected their benefits to stay the same. It is also due to factors like people not taking as many refunds as expected; when people take out refunds they leave a portion of the employer money in the plan, which is helpful because the system is not paying their full projected monthly benefits. When people do not take refunds it is bad news for the plan, and that is generating some losses.

MS. DELANGE reviewed how the TRS employer/state contribution rate changed from last year to this year. The biggest news was the investment experience increasing the rate, and the gain from the medical experience reducing the rate. She also showed a series of graphs showing the employer/state contribution rate history since 1999, the accrued liability history, and the funding ratio history.

Looking at changes in the unfunded liability for both PERS and TRS, MS. DELANGE mentioned that usually the two-year contribution delay is bad news, but it was good news for calculating the 2009 unfunded liability because there was a higher rate coming in than what Buck calculated had there been no two-year delay. The PERS unfunded liability is about \$6.3 billion, and the TRS unfunded liability is about \$3.4 billion.

MR. HULLA presented his comments on what has been happening in health care reform, stressing that the regulations still have to be developed and so unfortunately it is too early to tell what the impacts will be. Buck has been advising clients to stay calm, stay flexible, and to communicate carefully and often. He said the early retiree reinsurance program is great news in terms of potential flow of funds to the plan for the highest-cost participants. It is limited good news because it is a total \$5 billion program, and the first application could be \$10 billion worth, meaning applicants could get 50 cents on the dollar on the initial application. Five billion dollars is not a lot of money for all of the pre-Medicare retirees across the U.S. There is also conflicting information in the statute versus the web site explaining the statute as to whether those funds can be used solely for the benefit of plan members or if the funds can be allocated in terms of how much is spent by the plan member versus the plan sponsor.

MR. HULLA said there is a slim chance that removal of lifetime limits might not even apply, depending on how the law, as it is placed under HIPAA (Health Insurance Portability and Accountability Act), is interpreted. But it is likely that it will apply to retiree medical plans. The Alaska plan already has a \$2 million lifetime benefit maximum with a \$5,000 restore each year. Another aspect of health care reform is the many layers and types of provider fees and taxes, and that will increase the claim cost. The Cadillac tax theoretically would not apply to a state, but it remains to be seen how it is defined in terms of the true payers and if it applies to a third party administrator on a self-funded plan. Finally, the taxation on the retiree drug subsidy is a huge impact for private-sector, tax-paying entities. But it will probably help the outflow of funds under the Alaska plans because it is part and parcel of filling in the donut-hole that currently exists in the Medicare Part D plans. The State may tweak its retiree drug plan design a bit and take advantage of that filled-in donut-hole, and the pharmaceutical companies and the federal government will be paying more of the prescription costs and the State will be paying less.

MR. TRIVETTE said he would appreciate hearing from Buck in writing at the June meeting about their thoughts on the GRS report about the persistent gains and losses in the plans and how they are proceeding with that.

MS. DELANGE next reported on the 2009 roll-forward actuarial valuation results for the Judicial Retirement System (JRS) and the National Guard and Naval Militia Retirement System (NGNMRS).

Starting with JRS, the market value of assets went down to \$105 million, and the actuarial value of assets declined to \$126 million. The 120% cap applies here as well, so there is about \$21 million of deferred losses on the JRS plan. MS. DELANGE reviewed the calculation of the contribution rate: last year the rate was 36.2%, and this year it has gone up to 48.1%. The funded ratio declined to about 81% from 95% last

year. A graph of the contribution rate history as a percentage of pay showed a big decline in the rate for FY11 because of a large State contribution during FY08 to pay off the unfunded liability. Unfortunately, the timing was not so great, and the market losses of 21% in 2008 created an unfunded liability again. That is the main reason for a higher contribution rate this year. Other graphs showed the history of the accrued liability and the funding ratio history.

Moving on to the NGNMRS, MS. DELANGE said this retirement fund has less equity exposure so it experienced less of an asset loss in the latter part of 2008 than the Judicial System did. The investment losses were 9.75% for the past year. The total contribution declined from \$965,000 in 2008 to \$896,000 in 2009. The unfunded liability declined from \$534,000 to \$85,000, and this had to do with the two-year contribution lag. On an actuarial value of assets basis the funded ratio is nearly 100%.

MS. DELANGE reviewed graphs of the contribution amount history and the funding ratio history. She noted that NGNMRS also had a large contribution made to shore up the unfunded liability during FY08.

MR. SLISHINSKY presented a summary of the FY12 employer/state contribution rates for PERS (30.76%), TRS (42.61%), JRS (48.07%) and NGNMRS (\$895,565).

MR. SLISHINSKY next reviewed 30-year projections for PERS and TRS, starting with a slide of PERS projected contribution amounts at the actuarial calculated rate. Contributions are based on total defined benefit and defined contribution payroll, and it is a level percentage of pay amortization. As the number of people covered in the defined benefit plan goes down, and the total pay for defined benefit members declines, the contribution coming from that payroll is projected to go down. That contribution is expected to be made up by the contribution on the salaries of defined contribution plan members. Over time, the employer contribution is the sum of the defined benefit and defined contribution payroll. That is limited by the 22% that includes the employers' contribution to the defined contribution plan. The state assistance is the amount above 22% needed to fund the defined benefit piece.

The PERS contribution rate for FY12 is based upon the current valuation (June 30, 2009) — a contribution of 30.76% of pay, or \$649 million. The projections include an increase in the cost due the deferred asset losses currently in the actuarial value of assets that are going to be recognized over the next four years. That is anticipated to increase the employer/state rate to about the range of 34%-35%, which will hold relatively steady until 2029, when the first large amortization base gets paid off. Then there is three years' worth of reduced amounts of state assistance. Then the state assistance is projected to end. The employer payments primarily coming from defined contribution plan payroll will continue to pay off the remaining unfunded liability. Based upon the 25-year amortization, once that unfunded liability becomes fully amortized,

there should be no more payments to unfunded liability beginning in 2040. Also, Buck is projecting that there will be very few active members left in the defined benefit plan in 2040.

MR. SLISHINSKY presented a graph of the PERS funding ratio, noting that the funded status is expected to increase as the unfunded liability gets paid off over time. However, in the short term, the deferred losses being recognized through 2014 are expected to decrease the funded ratio to about 55% in 2014.

MR. SLISHINSKY also reviewed the TRS projected contribution amounts over the next 30 years. The employer rate for TRS is 12.56%, and the employer/state contribution rate is higher; the current valuation is 42.61%. The dollar amount expected for FY12 is \$303 million. In the absence of any other actuarial gains or losses, the employer/state contribution rate is expected to increase to the 51%-52% range as the deferred losses are recognized, before reaching a maximum of \$684 million in 2029. Once the large amortization base gets paid off, the contribution rates begin dropping, and the amount of State assistance required will drop.

MR. RICHARDS and MR. SLISHINSKY had a brief exchange about the FY07 gain on invested assets being amortized through fiscal year 2034.

MR. SLISHINSKY presented the TRS funded ratio chart, noting that once the deferred losses become fully recognized in the assets, and the funded ratio drops down to 49% in FY14, then the funded ratio will gradually increase and reach 101% in fiscal year 2034.

Having concluded the formal presentation, MR. SLISHINSKY opened it up for several questions.

MR. PIHL said he is always reminded of the charge to the ARMB by statute to see that the money is there. There is a \$2 billion difference last year between the funding ratio and the unfunded liability based on the real market value. That means the funding ratio overall is about 50% or 51%, not 61% average. He said that is a huge, huge difference and he was uncomfortable with it. Buck is projecting that in 2010 the State assistance will be \$336 million for PERS; 10 years later that figure is three times the size (\$938 million); and in 2029 the assistance will be \$1.375 billion. He said he was very troubled with that delayed funding.

CHAIR SCHUBERT thanked the Buck Consultants people for their presentation and called a break from 2:35 p.m. to 2:45 p.m.

16. Update: National Health Care Reform Legislation

COMMISSIONER KREITZER passed out a memorandum from the Governor's Office

outlining the basis for the State's entering into the Florida lawsuit based on the Commerce Clause in the Constitution. She stressed that, as the actuary reported earlier, there is a lot that is not known about the recently passed federal health care reform legislation. Also handed out was the Attorney General's analysis of the legislation. *[Both documents are on file at the ARMB office.]*

COMMISSIONER KREITZER mentioned two items that the Department of Administration is looking at that will impact the State's health care plans:

- The requirement to cover an adult child through age 25. Because of the timeline of a plan year beginning on or after six months after the enactment of the law, the State is looking at it in December for open enrollment for retirees.
- Reinsurance for early retirees. The total amount of money available for all states is about \$5 billion. The State still has to make a decision about whether to apply for that funding as it is joining in a lawsuit over a portion of the law. The Department of Administration is communicating with the Governor regarding information it has about the issues that impact the department.

COMMISSIONER KREITZER told fellow members that as things develop her department would come back with additional information at board meetings about what the State is doing in this regard.

MR. JOHNSON inquired if the State was going forward to establish the Health Benefit Exchange that is a provision of the legislation. COMMISSIONER KREITZER said she did not think a decision had been made on that. She added that the State departments are currently in the information-gathering stage and articulating for the Governor what any change would mean and what it would potentially look like. There are lots of federal regulations that have yet to be written that may have an impact on some of the provisions in the legislation.

MR. TRIVETTE stated that as a retiree group he gets phone calls constantly from people wanting to know what the State of Alaska is going to be doing. He asked if there would be regular or group meetings that people could attend to hear the discussions going on.

COMMISSIONER KREITZER replied that right now there is no plan for public meetings because at this stage the departments are doing a lot of fact gathering.

UNFINISHED BUSINESS

1. Disclosure Reports

MS. HALL stated that the disclosure report memo listing financial disclosures submitted since the last meeting was included in the packet, and there was nothing significant to

report to the Board.

2. Meeting Schedule

A copy of the revised 2010 meeting schedule was included in the packet. MS. HALL pointed out the addition of a tentative date set for some meetings on September 9 for the Budget, Real Estate, and Salary Review Committees. MR. BADER stated that staff was proposing October 7-8, 2010 as the date for the Education Conference in New York City.

3. Legal Report

Board legal counsel ROB JOHNSON indicated he had nothing specific to report on matters in which he has been directly involved.

Assistant Attorney General MIKE BARNHILL spoke by teleconference and brought the Board up to date on the status of the Mercer case. The trial will start July 6.

NEW BUSINESS - None.

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD - None.

PUBLIC MEMBER COMMENTS

DAVID TEAL, Director of Legislative Finance Division, spoke on the State's direct contribution to the PERS account. He handed out a summary of his comments with two graphs attached, which is on file at the ARMB office. He stated that the PERS account is short by the amount of the normal contribution rate times the defined contribution payroll, and the State pays that in addition to the amount that it pays because of the cap on the rates. Buck Consultants calculates this correctly and they adjust for it, but it is outside their calculations. It was handled in a memo as a follow-up to the rate calculations.

MR. TEAL referred to Figure 1 in his handout that he said showed what happens if there are full contribution rates; that is, if the rate is adjusted to include the normal portion of the defined contribution program. He said that as the contribution rate starts getting close to 22%, if the Board adopts rates as computed by Buck, the State will never be out of the business of contributing the extra assistance until the unfunded liability is paid off.

MR. TEAL said he supported adjusting the adopted rate to include an adjustment for the defined contribution portion of PERS. It would raise the contribution rate by about 2.25%, but it would greatly simplify things. The Board does not have to act today on it, or even act in the next five years on it, because the rate will not be approaching 22% any time soon. But the sooner the Board acts, the more logical it becomes to everyone.

The danger is that at any time — for example, if the price of oil were to drop drastically — the State could say it was paying aid only as it relates to the rate (the amount over 22%) but not kicking in the extra. This would leave a hole in the PERS account. This year that amount was about \$48 million. Figure 2 in his handout showed that as the proportion of defined contribution employees increases in the system, that amount would increase. As the contribution rate gets down near 22%, the amount [shifting to the State] could be over \$100 million.

INVESTMENT ADVISORY COUNCIL COMMENTS

DR. JENNINGS stated that the Alaska Balanced Fund and the Long-Term Balanced Fund are \$1.3 billion combined, which he viewed as large enough to be worthy of separate consideration. The funds have a great track record and are probably one of the long-term success stories of the Alaska retirement system. He contrasted these two funds to the funds voted on yesterday for the defined benefit plan, which have more international stocks, some emerging markets exposure, a more conservative bond portfolio, and more real assets. The funds for the defined benefit plan have things that more broadly reflect a more modern asset allocation. It may well be that the Defined Contribution Committee and the trustees as a whole look at it and end up deciding that the plans have appropriate asset mixes now, but he thought it merited separate consideration.

Regarding the defined contribution investment vehicles, DR. JENNINGS said he believes the target date funds are much improved and very close to the leading-edge best practice. He had asked T. Rowe Price the question because there is some conversation going on about customizing funds to reflect the specific circumstances of the participants. The participants in the 2055 Target Retirement Trust are almost certainly not defined benefit plan members, and the Target Retirement 2010 Trust participants almost certainly are defined benefit members. That is at least suggestive that they might merit different glide paths. He commended this to the Defined Contribution Committee and to staff, saying the decision may well be that simplicity is a good thing in designing a retirement plan, and having a disconnect at some juncture between two sets of target date funds might actually offset the point that he just made. He thought it should be an active decision, rather than just mere acceptance of what T. Rowe Price has presented.

DR. MITCHELL said he had observations on two topics that were touched on during the meeting: investment performance rankings, and the risk-return relationship of asset classes. He said that, as usual, his comments were meant to provoke thought and elicit questions, and they ought not to be taken as his own rock-solid beliefs or a special call to action by the Board. Regarding performance rankings, there was a study done by someone in the past few years that demonstrated that if you look at the top-decile ranked mutual funds, the real stars of the investment world, their year-to-year

performance had at least one year — and often more than one year — where, without exception, these best-performing funds were in the bottom quartile, often in the 90th percentile of their universes. So while no investment management team strives to be in the fourth quartile, it does happen, and it doesn't necessarily mean that there is anything wrong with the fund's posture or the fund's approach or that superior long-term performance won't be resumed. That goes for individual managers, as well as for the totality of a fund such as the Alaska retirement fund.

Regarding the risk-return characteristics of asset classes, DR. MITCHELL said we would all like to believe that there is a very neat relationship between risk and return in asset classes. That is, the more risk you take, the more return you expect you will get; and the less risk you take, the lower your expected return should be. That seems very logical. But look at the results over the last ten years or so, for example, Callan's periodic table of asset class returns, or similar displays that you can find that include even more asset classes. Year-to-year asset class returns and rankings seem almost random; they bounce around, with leaders becoming laggards, and laggards becoming leaders, with what seems to be little conclusive relationship between risk and return. Sometimes a higher-risk asset class does better and sometime it does not. Sometimes a lower-risk asset class does better and sometimes it does not. There isn't anything close to a firm relationship, the kind of relationship we think we should see. So are you guaranteed a higher return if you take more risk? And if you accept a lower return, are you guaranteed less risk? If that is true, and there may not really be a solid link between risk and return, what does it mean for asset allocation? This is food for thought.

TRUSTEE COMMENTS

MS. ERCHINGER said she neglected to report under Committee Reports that she and Trustee Harbo, along with Mr. Bader and Mr. Sikes, attended a real estate education conference in Phoenix in March. Being new to the Real Estate Committee, she found it fascinating and a great education opportunity. She was especially intrigued by the issues of the various styles in real estate and how during the period of high growth those styles sort of merged as they took on a lot more leverage and therefore a lot more risk. One of the recommendations she got out of that conference was that folks investing in real estate should pay close attention to leverage and risk when they are looking at their portfolios. She said the speakers did papers on the subjects they presented, and she had the materials available for any trustees who were interested in reading them.

MR. RICHARDS stated that as a retired teacher he has been quite sensitive to the term "merit pay," and he has spent a lot of time talking about whether that has a place in education or not. But he certainly thought that merit pay ought to apply in the investment manager world. He said he was getting a little bit tired of hearing that the vendors do not meet their benchmarks but that they are poised for the future: in the three years he has

been on the Board he has been hearing managers say they are poised for the future. Nobody saw what was going to happen in 2008. But maybe in the way fees are negotiated in the future there should be some way where the vendors are rewarded for excellent behavior and beating the benchmark. And there should be some kind of investment on their behalf in not collecting fees when they continually do not meet the benchmark. The Board puts managers on a watch list, but time and time again the vendors are not meeting their benchmarks, and it is getting a bit frustrating.

FUTURE AGENDA ITEMS

MS. ERCHINGER said she was still interested in learning the mechanics of how the rebalancing occurs, especially between the various retirement systems, as well as between the asset classes in the systems. The second issue had to do with something that Trustee Harbo brought up and a question that she also had. A better understanding would be helpful on how the State's on-behalf payments are made into the system. Payments are based on the projected budgeted salaries for the coming year, and she wondered what happens when those salaries are either higher or lower than projections, and if there is some sort of true-up.

MR. TRIVETTE requested that the Board have enough time set aside to review the experience study once Buck submits it to the ARMB. He recalled that there were a lot of questions on the previous experience study. The assumptions are based upon that information, so it is very important that trustees truly understand that. Members ask him questions about where the assumptions come from and if they are accurate, and he knows that some of the current assumptions are out of line with the reality of what has been happening for the last four years.

ADJOURNMENT

There being no objection and no further business to come before the board, the meeting was adjourned at 3:14 p.m. on April 23, 2010, on a motion made by MR. TRIVETTE and seconded by MR. RICHARDS.


Chair of the Board of Trustees
Alaska Retirement Management Board

ATTEST:


Corporate Secretary

Note: An outside contractor tape-recorded the meeting and prepared the summary minutes. For in-depth discussion and more presentation details, please refer to tapes of the meeting and presentation materials on file at the ARMB office.

Confidential Office Services, Karen Pearce Brown
Juneau, Alaska